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Activity based costing within a DLA depot's Planning & Resource Management Department: A Model and Analysis

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Activity Based Costing Within a DLA Depot's Planning & Resource Management Department: A Model and Analysis

by

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This thesis examines the Planning and Resource Management Department of the Defense Distribution Region West (DDRW) in their pursuit of introducing Activity Based Costing (ABC) to their organization. The thesis focuses on the workload impact of ABC on the department by developing a model that establishes the baseline workloads and costs. The model is created by the aid of a computer modeling software that incorporates the various physical constraints with the financial costs and variable external demands or requirements involved. With the baseline model completed, the anticipated ABC impact is introduced to the model and the results are assessed. This thesis answers the question as to the scope of the ABC impact on the DDRW Planning and Resource Management Department and demonstrates how ABC modeling can be an effective management tool. The model and the resulting analysis demonstrate both the strengths of ABC management for federal agencies and the viability of using computer model analysis in financial management decisions.

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ABSTRACT

This thesis examines the Planning and Resource Management Department of the Defense Distribution Region West (DDRW) in their pursuit of introducing Activity Based Costing (ABC) to their organization. The thesis focuses on the workload impact of ABC on the department by developing a model that establishes the baseline workloads and costs. The model is created by the aid of a computer modeling software that incorporates the various physical constraints with the financial costs and variable external demands or requirements involved. With the baseline model completed, the anticipated ABC impact is introduced to the model and the results are assessed. This thesis answers the question as to the scope of the ABC impact on the DDRW Planning and Resource Management Department and demonstrates how ABC modeling can be an effective management tool. The model and the resulting analysis demonstrate both the strengths of ABC management for federal agencies and the viability of using computer model analysis in financial management decisions.

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I. INTRODUCTION

A. AREA OF RESEARCH

This thesis will investigate and analyze the implementation and the impact on the Planning and Resources Management department (formerly the Accounting department) of the Defense Distribution Region West (DDRW) Tracy, California of an Activity Based Cost Management program. A model will be constructed of the Planning and Resource Management department using an Activity Based Costing (ABC) modeling software. The model will be utilized to analyze ABC implementation at DDRW Tracy and to help answer the research questions.

B. PRIMARY RESEARCH QUESTIONS

The primary questions for this research are what impact will the implementation of Activity Based Costing have on the operation of the DDRW Planning and Resource Management department? How will it effect the department's ability to perform its other functions? Can the department successfully adapt to an ABC system? What will be the constraints? Are there any benefits from the ABC implementation for the department? What costs are involved?

C. SCOPE OF THESIS

This thesis will provide an overview of DDRW's Planning and Resource Management department in regards to organization and general workload. This thesis will then examine the potential impact of the ABC program. In order to quantify the Planning and Resource Management department's organization and workload, a software product called *Net Prophet II, the Model Approach*™ will be utilized. Using that software, a model of the DDRW Planning and Resource Management department will be constructed. The model will incorporate the resources, constraints, and requirements utilized to perform the department's functions or activities. The model will then be manipulated to estimate the long term requirements of implementing an ABC system on the Planning and Resource Management department. It will discuss the organizational and operational changes ABC brings to DDRW. The leadership at DDRW essentially wants to know: Does the Planning and Resource Management have the resources to perform the work ABC requires?

D. METHODOLOGY

Data was collected by on-site interviews, on-site observations, review of DLA directives, and analysis of DDRW cost data. Research was performed to understand how the Planning and Resource Management department operated and what products and services it provided. After information was

gathered and research performed on both ABC and the ABC modeling program, an ABC baseline model for the Planning and Resource Management was developed. With the model completed, a list of the anticipated changes was developed, reviewed, and then analyzed. In the context of the model, the research questions will be addressed.

E. OVERVIEW OF THESIS CHAPTERS

1. Chapter I: Introduction

Chapter I (this chapter) has presented an overview of the thesis and the information that will be presented.

2. Chapter II: Background

Chapter II will give a brief overview of the Defense Logistics Agency (DLA) and the recent changes in its organization brought about by the Defense Management Review Directive 902. The new regional organization in Tracy, California, Defense Distribution Region West (DDRW) will be presented. DLA's interest in Activity Based Costing will also be introduced.

3. Chapter III: Methodology

Chapter III will present an overview of ABC and its measurement concepts. It will also discuss the benefits the Defense Department may realize by using an ABC system. The ABC program being implemented at DDRW Tracy will also be presented. Finally *The Model Approach*™ of ABC and its basic methodology will be introduced.

4. Chapter IV: The Model

Chapter IV will present the data and construction of a baseline ABC model for the Planning and Resource Management department. The model will be constructed with the aid of the PC-based computer software called *Net Prophet II™* by the Sampling Corporation. The software will illustrate, document and quantify the department's organizational activities. By using the ABC modelling software, information about the activities of the Planning and Resource Management will be derived.

5. Chapter V: Analysis

In Chapter V, using the computer software, data from the baseline model will be manipulated to reflect the expected changes an ABC system will require. Computer results will be presented. Can the department adapt successfully based on the data collected? An analysis of the ABC implementation and its effects will be presented.

6. Chapter VI: Conclusion

Chapter VI will include overall conclusions, observations, impressions and recommendations, as well as suggestions for future research.

F. BENEFITS OF THIS THESIS

This study should provide DLA managers an outside look at how ABC could impact their accounting and other business operations. It will address the costs and benefits of an ABC

system. This thesis may help in the education and training of Department of Defense managers, specifically in regard to the implementation of an ABC system.

II. BACKGROUND

This chapter provides background information on the Defense Logistics Agency (DLA) and specifically the DLA depot at Tracy, California. It reviews the changes that have recently occurred and the upcoming implementation of Activity Based Costing.

A. THE DEFENSE LOGISTICS AGENCY

After World War II, a presidential commission chaired by former President Herbert Hoover recommended centralizing management of common military logistics support. In October 1961, the Defense Supply Agency (DSA) was set up as the first joint service logistic organization.[1] Originally the idea behind DSA was to provide a consolidated approach to a limited set of routine supply items common to all the military services. In many cases, DSA would provide these supply items to the individual services in bulk or "wholesale" lots. The services would then stock these items in smaller quantities for "retail" distribution to end user activities within their military service.

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[1]Chojnowski K. C. and R. W. ller, "An Analysis of Unit Costs At A Consolidated Supply pot" (M.S. Thesis, Naval Postgraduate School, Monterey, C December 1990), 16.

Over the years, DSA grew in both scope and size, creating dozens of domestic stock points. In 1976, DSA was renamed the Defense Logistics Agency (DLA) to reflect its increased role in military logistics support. As a Department of Defense activity with little or no intraservice competition for funds, DLA was considered to be best equipped, staffed, and funded supply operation. DLA's supply operations focus enabled DLA managers to fully fund warehousing and other logistic support activities. The same could not be said for the individual military services which had to balance logistics needs with hardware and personnel demands. The Navy, for instance, considered ships, aircraft, intermediate maintenance facilities and munitions as more pressing concerns for financial support than their logistic support infrastructure. As a result, DLA's warehouses and equipment have been consistently the youngest and most modern overall. Over the years, DLA also acquired a solid reputation for on time delivery of supplies. Having the overwhelming majority (90%) of their supply requests come in as routine requests in large bulk quantities allowed DLA to establish an impressive track record as both an effective and efficient logistics organization. DLA's modern facilities and their organization's dedicated support to their mission area have stood head and shoulders above the individual military services' logistic organizations.

B. NEED FOR CHANGE

Though there has been widespread agreement among military analysts that military logistic support for the United States Armed Forces is second to none, there is also a strong agreement that the overall support structure operates at a suboptimum level. One of the strongest criticisms against DoD's logistics was the warehousing of common supplies by the different services at many different sites. In Northern California, for example, it was noted that DLA Tracy, Naval Supply Center Oakland, Sharpe Army Depot, the Navy's Rough and Ready Island, Sacramento Army Depot, and McClellan Air Force Base all had similar items warehoused for support and all these activities are within 100 miles of each other.

The Northern California example, along with several other similar situations around the United States, was viewed as inefficient. However, the territorial nature of the military services, the concerns of job protection in local congressional districts and the continued pressures of a cold war environment all worked in concert to stifle any call to change or streamline. Despite the resistance to change, change eventually does happen. In the world of logistic support, the realities of declining budgets forced military planners to study cost efficiency in fundamental ways. Before 1986, resource allocations were analyzed in an incremental fashion. In other words, a baseline DoD budget was in place and budget decisions were then made on how much of an increase

would be allotted to DoD. After 1986, budgets declined in real dollars. In 1989, with the collapse of the Soviet Union, the increasing Federal debt, and public support to redirect military spending to other needs, the decline in resources accelerated. DoD had to make difficult management decisions.

C. DEFENSE MANAGEMENT REVIEW

In 1989, faced with the long term prospect of many future years of reduced funding, DoD began a series of Defense Management Review studies as a means of identifying potential areas where cost savings could be realized. Some of these studies resulted in the issuance of a Defense Management Review Decision (DMRD) which put management recommendations into action.

In the logistics world, DRMD 902, issued in November 1989 addressed the consolidation of DLA and the individual military service supply depots.[2] After much negotiating, the Pentagon agreed to implement a consolidation prototype for supply operations. Northern California was selected as the prototype and in June 1990, Sharpe Army Depot, Sacramento Army Depot, McClellan Air Force Base Logistics Center and the Physical Distribution Department of the Naval Supply Center Oakland were all consolidated under the control of the DLA Defense Depot in Tracy, California.

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[2]L. R. Jones, "Minding the Pentagon's Business," Government Executive, October 1992, 40.

D. CONSOLIDATED OPERATIONS

The new DLA command was titled Defense Distribution Region West (DDRW), and it was not long before funding pressures forced DLA to take over consolidated activities in the eastern and central United States. In 1991, the prototype became the production model. With few exceptions, DLA had the logistics responsibility for the Department of Defense. Since 1991, DLA has been consolidating diverse operations and still maintaining service at the same or better level for customers. Maintaining the same or better service level, despite consolidations, has been a sensitive area for DLA management and one that has been made more difficult by funding constraints. Consolidation in management functions and warehousing functions has produced some cost efficiencies but has also produced some cost confusion. Combining logistic activities has made it more difficult to identify costs of services and outputs for the individual military services. The current accounting practices do not clearly present costs for the different functions. As a result, accounting practices have also come under review.

E. DEFENSE BUSINESS OPERATING FUND

DoD issued another DRMD regarding the funding provided to support activities within the Department of Defense. In order to more accurately provide funds to activities providing variable service levels, certain support activities would

receive funding based on the output they are tasked to perform. The Defense Business Operations Fund (DBOF) concept was established in 1991. Though the name was new, the concept had been successfully used for years. Stock funds and industrial funded commands have used the revolving fund concept to support their budgets since the 1950's. DBOF is a consolidation of all of DoD revolving funds into one omnibus revolving fund controlled by the DoD Comptroller's office.

Based on the cost of producing output and the expected output, the comptroller's office determines a unit cost for each good or service produced. As commands produce units of goods or services, revenue for their budget is generated. If the activity level rises and more "units" are being produced, then revenue would increase proportionally to cover the increased cost. The idea is that each defense activity is funded no more or less than it needs to produce its services. Funding under DBOF is intended to provide resources concurrent with changes of output or activity.

F. UNIT COSTS

If funding is based on activity level, a command's fiscal survival depends on both a well defined output or "unit" and a proper "unit cost". The traditional method for developing a unit cost was to determine what outputs are being produced, assign any direct costs to the process that caused them and then *allocate* the rest of the costs evenly across the board to

the various defined products. This "meat cleaver" approach has some advantages in time and expediency. It also works very well for an activity with a single homogeneous function, where all costs could be thought of as directly related to a single item being produced. Unit cost can, however, cause problems to a command which produces a variety of goods and/or services. Some questions to consider are these:

- Is the command's method of cost allocation a fair manner of distribution for the particular units being produced? (For example, would allocation be fairer if based on machine hours vice labor hours?)
- Does the unit cost contain allocated costs which are not actually associated with the unit production? (For example, should motor pool costs be allocated and included in a particular unit cost?)

G. ACTIVITY BASED COSTING

DLA has recognized this problem of identifying costs and, in 1993, began a project to more accurately develop costs for the many varied activities within one of its organizations. DLA hopes to enhance unit costing by using the concept called "Activity Based Costing". Activity Based Costing (ABC) has been around for a while in the civilian business world. It has proven to be an effective management tool for companies trying to trace their costs to various business functions and identify what drives costs and what does not. After a trial implementation of ABC at the Defense Industrial Supply Center (DISC), a DLA activity, DLA leadership made the decision to

implement ABC at all its commands. In a letter dated 20 August 1993, Major General Lawrence P. Farrell, Jr., Principal Deputy Director of DLA told all of the DLA Commanders of the plans to implement ABC DLA-wide.

> ABC provides management with information to improve processes, eliminate waste and execute business operations and strategies while continuing to satisfy customer needs.... ABC will help us all improve our business processes, thereby increasing efficiency and mission focus.[3]

DLA's Defense Distribution Region West (DDRW) at Tracy, California has begun its transition to ABC. In January, it began training supervisors and currently is developing plans based on DLA headquarter's guidance. This is another in the many changes Tracy has experienced since consolidation with the other supply activities in 1990. Since the consolidation, many activities' costs have been hidden in the numerous administrative and service consolidations. It is not uncommon in DDRW to have people located at one site working full time to support another site.

In the next chapter, the ABC concept and its implementation within the Planning and Resource Management Department at Tracy will be explored in detail.

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[3]Lawrence P. Farrell, Jr., Major General U.S. Air Force, to DLA Commanders, 20 August 1993, Correspondence on file with Defense Logistics Agency Headquarters Cameron Station, Alexandria, Virginia.

III. ACTIVITY BASED COSTING METHODOLOGY

This chapter will introduce the basic concepts behind Activity Based Costing and how ABC can be used to help manage an organization. This chapter will also present the basic ideas DLA is using to implement its version of ABC. Lastly, an ABC software product called "The Model Approach™" will be discussed. The Model Approach™ will serve as the method by which this thesis will examine the DLA Tracy Depot's Planning and Resource Management Department.

A. WHY ABC?

Activity Based Costing (ABC) is the concept of developing the cost of outputs on the basis of the activities that consume resources. Traditional cost accounting methods can satisfactorily allocate costs but such allocations may not be related to activities and are therefore not based on organizational processes. While traditional methods trace direct resource consumption to a particular output, they do not do the same for common costs or cost pools. Instead, traditional methods take cost pools not directly related to an output and allocate them over some supposedly reasonable basis. In other words, a common unit of measure such as labor hours or number of personnel is used as the method of division or allocation for all the different activities. In contrast,

ABC not only traces the direct costs to output but also, to the extent practical, identifies cost drivers, which are those activities that consume resources in output production. Indirect costs that can be identified to an activity often can be traced to outputs based on relationships between the process activity and the output. The result is a better accounting for an activity's cost as it relates to output. An allocation formula is not used unless it is perceived to realistically reflect the cost distribution associated with an activity. All costs are analyzed and traced back to specific functions. A value is assigned based solely on what an activity is observed or expected to consume. Understanding what value each activity represents to an organization provides insight into how its scarce resources are utilized and enables managers to view and manage operations in a new and more informative way.

Though accounting has been providing meaningful business information for centuries, the idea of integrating any type of accounting concepts with organizational processes or outputs have been recognized only in the last forty years. The accounting professionals were viewed as the traditional financial recorders or historians of an organization, not active agents in management. In his book, *Activity Costing for Decisions*, University of California Professor George Staubus noted:

> Prior to 1953, the [accounting] profession had not embraced the objective of providing information useful for making management decisions; in fact, it had not explicitly identified any objective of the practice of accounting. Nor had any individual writer identified decision usefulness as the objective of accounting, so no one had sought to build a conceptual framework on that objective.[4]

ABC is a methodology designed to bridge the communication gap between the data accounting systems accumulate and the financial information management needs for business decisions. Traditional cost management systems focus on managing costs by means of cost based budgets and measurements usually established at a departmental level. The ABC approach is to manage costs at a process or activity level, even if it cuts across traditional departmental or organizational boundaries. ABC information can be used in a wide range of management decisions. As noted by author and management accountant Paul A. Sharman,

> On its own, ABC provides better cost information. But its most effective use is in the framework of change and continuous improvement, usually involving process re-engineering and performance measurement.[5]

Whether it is in product costing, strategic planning, performance measurement for managers, or investment decisions, managers using ABC information can provide dynamic real-time insight into operations. It also gives management valuable

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[4]George J. Staubus, Activity Costing for Decisions (New York: Garland Publishing, Inc., 1988), vi.

[5]Paul A. Sharman, "Activity-based Costing: A Growing Practice," CMA Magazine (March 1993): 17-22.

information on the utilization of scare resources and whether particular processes and outputs are the best uses of those resources. The optimal utilization of resources is not only in the best interest of private sector firms; government can benefit, too, especially in an environment of declining resources. ABC helps all managers examine their processes, manage activities which drive costs, and especially attack and hopefully reduce that ubiquitous black hole known as "overhead".

B. ABC MEASUREMENT

In an ABC system, cost must be related to things being done. The ABC methodology provides a conceptual framework to establish those relationships. As Professor George Staubus states:

> To begin with, let us visualize an account for every interesting activity in an organization. While this obviously raises questions as to what is meant by an activity and which activities are interesting, the general idea is to keep an account for each function, operation, task, or process about which management may need information for managing the entity. Each activity must have an intended output, or objective, which may or may not be divisible into units. Each activity must also have inputs--means of accomplishing objectives. Inputs are measured at their cost--the sacrifices of alternative service potentials involved in applying the commodity or service to this activity. Outputs may be expressed in nonmonetary units but also must be measured in monetary units.[6]

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[6]Staubus, Activity Costing for Decisions, 23.

ABC measures activities by defining "cost objects" and "cost drivers". "Cost objects" are the processes, products, and services to be costed. "Cost drivers" are activities that consume resources. Cost drivers are organizationally specific, and what may be a driver in one organization is not necessarily a driver in another. Some examples of cost drivers include number of receipts into a warehouse, number of issues from a storage facility, number of transactions in the queue, and number of special crating jobs. An Activity Based Costing system uses cost drivers to trace resources to activities and activities to cost objects.

C. ABC MANAGEMENT AT DLA

John Miller of Miller-Newlin Consulting is among America's foremost advocates of ABC. His firm specializes in the implementation of Activity Based Costing Management. They were selected by DLA to assist in setting up an ABC management program at each of the DLA sites. Mr. Miller advocates an eight step procedure for implementing ABC management within an organization.[7] The eight steps encompass the defining of activities and how these activities make up a process. Though these steps are tailored for Miller-Newlin Consulting's ABC implementation program, they do remain true to the general

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[7]John A. Miller, "The Best Way to Implement an Activity Based Cost Management System," Corporate Controller (September/October 1990): 8-32.

consensus approach for ABC. These steps also provide an insight into the implementation of ABC at the Tracy DLA Depot.

- STEP ONE: Management decides on purpose for implementing ABC and how it will be used.
- STEP TWO: Specify Activities. By proceeding department by department, specify activities and then determine processes.
- STEP THREE: Select a time frame and obtain traditional department expenses and other financial data.
- STEP FOUR: Trace each cost obtained in step three to each of the previously defined activities. This task would include determining time allocation for all personnel for each activity, then tracing total labor costs based on this time allocation.
- STEP FIVE: Determine Value versus Non-Value Added Cost. Classify each activity as Value or Non-Value Added from the customer's point of view.
- STEP SIX: Determine Output measures and volume.
- STEP SEVEN: Select appropriate Cost Drivers and measures. A cost driver is a factor that has a direct influence in the cost and performance of subsequent activities. All costs are considered, not just direct costs such as labor.
- STEP EIGHT: Trace costs to individual product lines. Costs for individual product lines are determined by the proportion of activities consumed. In other words, what processes or activities were required to produce the product line and what is the proportion for each of the activities.

There are some important overall concepts that should always be kept in mind when following the aforementioned eight steps. Costs are incurred when people or machines do things (activities). Businesses are not composed of separate and independent departments, but rather of series of interrelated activities that together represent processes. Lastly, some

activities are more important to the success of the business than others.

D. ABC MANAGEMENT

After initial activity performance information has been collected and a periodic data collection for ABC is in place, a new perspective can be obtained on the cost of processes or products. With ABC, cost visibility includes defining value added costs and non-value added costs, outcome and volume measures, measures of key cost drivers, costs per unit of outcome and costs associated with individual product lines.

With such cost visibility, management can look at ways to streamline major cost drivers and possibly eliminate non-value added processes. For example, a company that runs large baking ovens finds out that oven operation is a major cost driver. Now that ABC has highlighted this cost, management can focus on ways to minimize this cost driver. In the case of the baking oven, management may examine more efficient oven loading methods, cook optimum batches or improve energy efficiency. ABC also provides management the cost information which may help determine optimal output levels in both rate and volume.

One of the best management tools ABC gives the organization leadership is the ability to break out value added costs and non-value added costs. In developing value and non-value added costs for ABC management, activities and

the processes that activities make up can not be the end result but only a means to a product or service to a customer. Each cost or activity has to reviewed and a decision made whether the cost adds value to the final project. Costs for material and tooling would be considered value added costs. Any costs that contribute to raising the value of a product or service are value added costs. Costs for rework or costs for clean up would be considered non-value added costs. Naturally many non-valued added costs can not be eliminated. However, management could review ways to minimize non-value added activities. The bottom line for management using ABC is to plan, manage and improve management efficiency with regards to cost at it's source, namely the activity level. The results should be better quality at a lower cost.

E. ABC: THE MODEL APPROACH™

Recently, a new approach to ABC systems has been designed. Following the basic concepts of ABC management, the Sampling Corporation conceived of the idea of constructing a comprehensive computer-based model of the various activities and the activities' inputs and outputs. The Sampling Corporation's *The Model Approach*™ takes the concept of ABC to a more dynamic level than spreadsheet-like ABC packages can attain. Where ABC concepts, for the most part, follow the eight step outline DLA has implemented, *The Model Approach*™ goes further. A good comparative analogy would the

relationship of computer operating systems. ABC could be viewed as the basic DOS computer operation system--very versatile and informative, but not very user friendly. Its operations can be difficult to visualize and control. *The Model Approach*™ could viewed as a *Windows*™ computer operating system--a visual (graphic) and user-friendly interface that incorporates visual images and intuitive logic for providing a better understanding and feel of its operations. As *Windows*™ is an extension of the basic DOS system, so too is *The Model Approach*™ an extension of the ABC Management concepts. Moreover, *The Model Approach*™ clearly integrates the process flow with the cost flow, recognizing that costs are merely a consequence of management decisions and operational processes.

Using *The Model Approach*™ software, the user combines the various inputs and outputs of an activity, both financial and nonfinancial, and creates a flow chart schematic. The various activities are connected together to display the overall process connecting inputs to outputs. As The Sampling Corporation states, "The Model Approach creates a visual image of operations and their costs at each stage integrating operating and financial data, utilization levels and costs, and capacity restraints."[8] The resulting visual

[8]The Sampling Corporation, Implementing Activity Based Costing--The Model Approach™ (Mississauga, Ontario, Canada: The Sampling Corporation, 1993), O.17.

representation then can be analyzed and give managers a unique way to trace costs and study the interrelationships of activities within an overall process. The idea of a model approach is well suited for Activity Based Costing. The basic requirements for ABC implementation are the perfect building blocks for a model. Under ABC, management defines outputs, processes and the activities that compose them. Management also identifies the resources that activities consume. With the processes and resources delineated, cost information can then be incorporated for a dynamic understanding of both the activities and the resources involved in management's final product. As Professor Staubus stated earlier inputs are "sacrifices of alternative service potentials".[9] With this understanding, models can show how scarce resources are used and how management can maximize their service potential. Models help view the relevant portions of a process and can help prevent the overlooking of important parts of the process.

The ability to manipulate classic "what if" scenarios is a strong suit of a PC-based model. Once the activities, resources, inputs, outputs and constraints are defined, model scenarios can be created which simulate different management decisions or assumptions about the future. The resulting simulated outputs can be reviewed and give management a

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[9]Staubus, Activity Costing for Decisions, 23.

definitive look at the "sacrifices of alternative service potential" and identify possible problems for which to prepare. This approach also lends itself well to the optimization of operations. Finally it gives management the tool to focus on the cost of getting things done. *The Model Approach*™ keeps the connection and focus on the defined activities and prevents cost numbers from standing independently from the process.

F. DLA AND ABC

The ABC approach lends itself well to DLA budget and operation concerns. As Department of Defense officials push for a more business-like approach to resource allocation, ABC's ability to better represent the cost of different activities becomes vital to management. The traditional accounting approach DLA used in the past gives an overall agency level cost but provides little information useful to lower level managers. DLA activities, managed under the DoD unit cost concept, in theory could use unit cost information to manage activities. But, unit costs, which are derived simply by dividing total costs by the number of all outputs, may be a very poor reflection of the costs associated with one particular unit of output. The consensus of head management at DLA is that Activity Based Costing would be a very helpful management tool and would make available good information about the many outputs form the agency. However, concerns

about the additional work in data collection and processing have many leaders worried. Can ABC be implemented and run effectively without causing more problems in the overall work load? Perhaps the ABC model approach itself can answer whether ABC operations can be efficiently run. The next chapter will introduce an ABC model for the DLA Planning and Resource Management division at the DLA Tracy Depot--the division most affected in coordinating the measurements, data collection and presentation. The model will include both the standard work involved (work as currently done) plus the projected additional work needed (future workload) to run the DLA ABC program within the division.

IV. THE MODEL

In this chapter, a review of DDRW's Planning and Resource Management Department's organization structure will be presented. This chapter will also review the construction of an ABC model for DDRW's Planning and Resource Management Department, its abilities and its constraints.

A. THE ORGANIZATION AND ITS OUTPUTS

It is critical that a thorough understanding of outputs is achieved for the model. The *activities* and their final outputs must be understood and have relevance to the overall process in order that costing data can be properly presented. The first step for the model construction, therefore, must be a defining of the organizational processes and its main outputs.

The Planning and Resource Management Department (Figure 1), like most other departments at the DLA site, has undergone a name and organizational changes. The Department originally was the Comptroller Department but, in view of its expanded role in budgeting, performance studies, functional reviews, costing research and its diminished roles in actual accounting functions, the name was changed to better reflect its mission. The comptroller still heads the department and despite the expanded role for the department, budgeting and cost

management are still at the heart of its responsibilities. The comptroller (designated by the code "R") has three divisions working directly for him. They are the Program Budget Division (code "RB"), the DDRW Finance Liaison Office (code "RF"), and the Planning, Productivity and Management Division (code "RO").

1. The Program Budget Division

The Program Budget Division (Figure 2) is composed of two sections. The first section is the Analysis and Review section (RBA). This section is primarily composed of budget analysts. This section's role is to oversee the unit cost system[10] and integrate it with the new Management Information System, a new omnibus computer-based management information system being develop for all of DLA. This section also controls the monthly unit cost summary reports for the DDRW activity sites. Using the analyst staff, computer equipment and various office supplies, their main outputs are the unit cost summary reports (recurring) and the completion of the Management Information System project (one time).

The second section is the Budget section (RBB). This section controls the budgets and associated operating targets

[10]The unit cost system is a DoD resource allocation system whereby an activity receives "payment" for a unit of output equal to the assigned average cost per unit of output. The Program Budget division's Analysis and Review section oversees the operation of the unit cost system at DDRW.

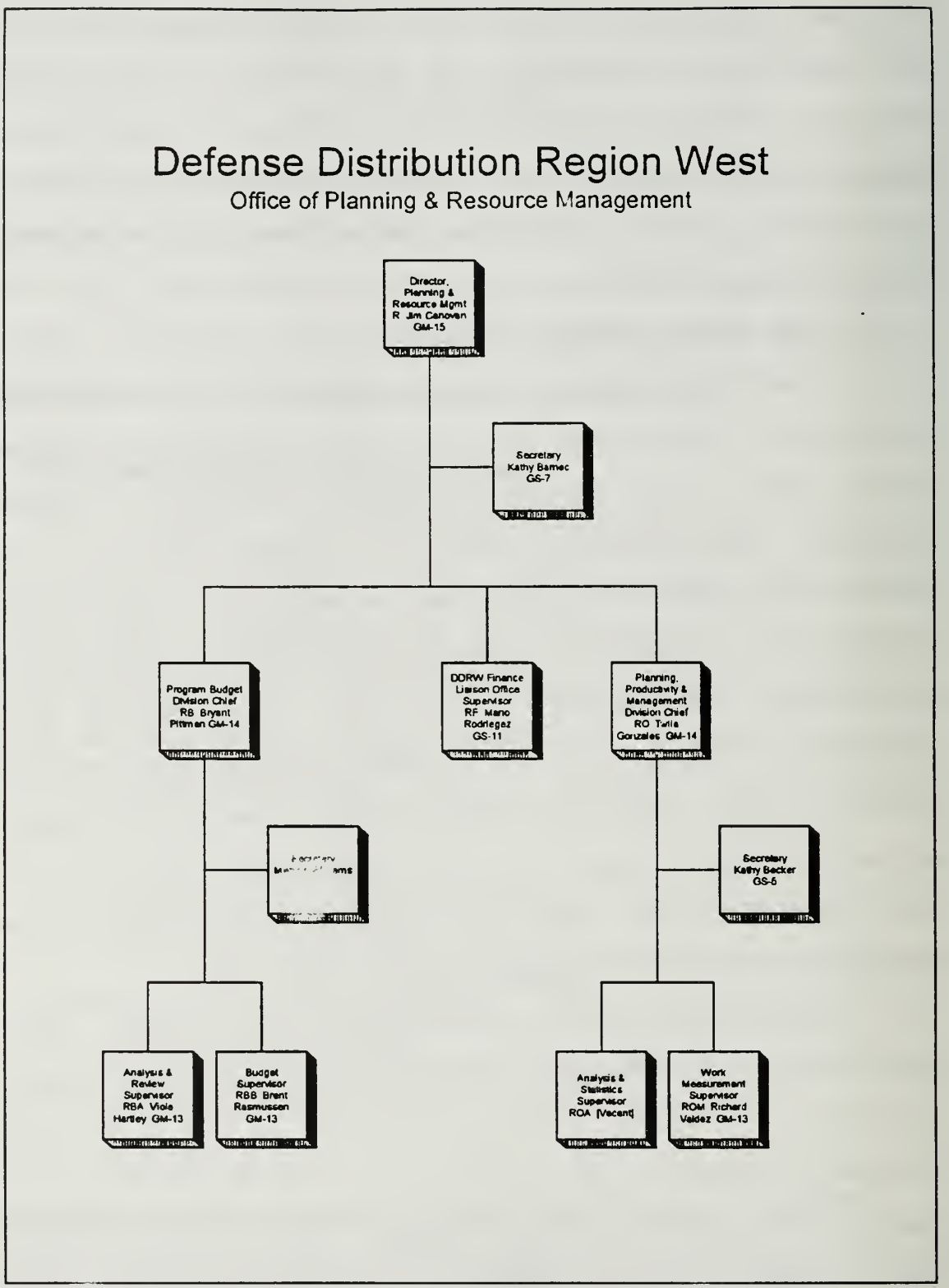

Figure 1 Office of Planning and Resource Management

for DDRW. This section is also primarily composed of budget analysts who handle the formulation, administration and reconciliation of the various budgets, reimbursable funds, and interservice support agreements for DDRW. Using the budget analysis staff along with their office supplies and computers, their main outputs are the individual depot accounts for the DDRW distribution sites and the region level accounts and interservice support agreements for the DDRW.

2. The DDRW Finance Liaison Office

The DDRW Finance Liaison Office (Figure 3) is a recent creation of the latest reorganization of the accounting functions for DLA. Accounting ledgers are now centrally managed at DLA's Defense Finance and Accounting Services (DFAS) site. The Finance Liaison Office was set up to control inputs and reconcile reports with DLA's general ledgers. Besides accounting inputs, the office also runs a customer service program to handle employee payroll changes and problems. The office is primarily composed of accounting technicians. Their main outputs are the accounting inputs which DFAS uses to record transactions, accounting report reconciliations with DFAS, and solving customer problems.

3. The Planning, Productivity & Management Division

The Planning, Productivity and Management division (Figure 4) is divided into two sections. The first section is the Analysis and Statistics section (ROA). This section

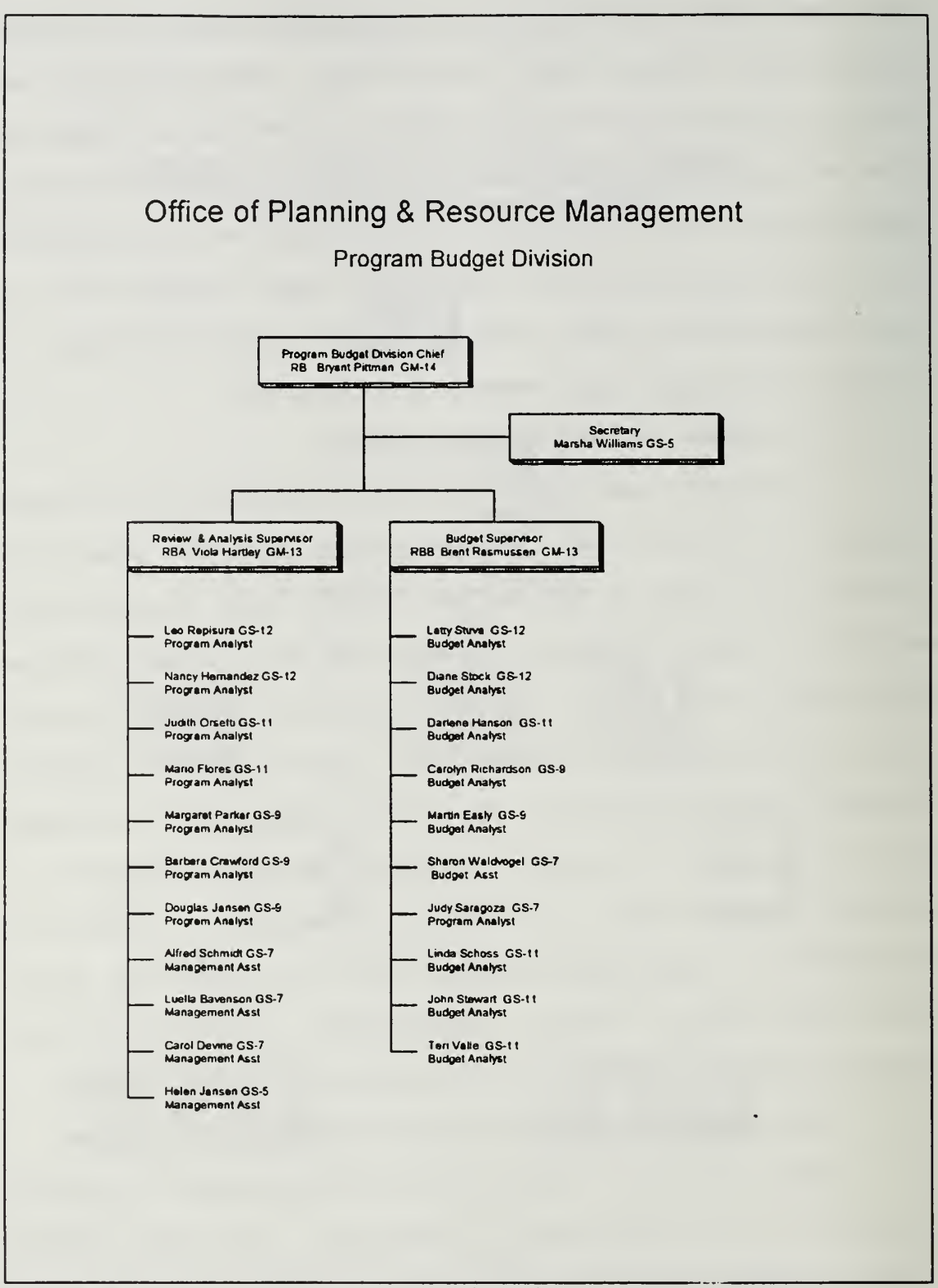

Figure 2 The Program Budget Division

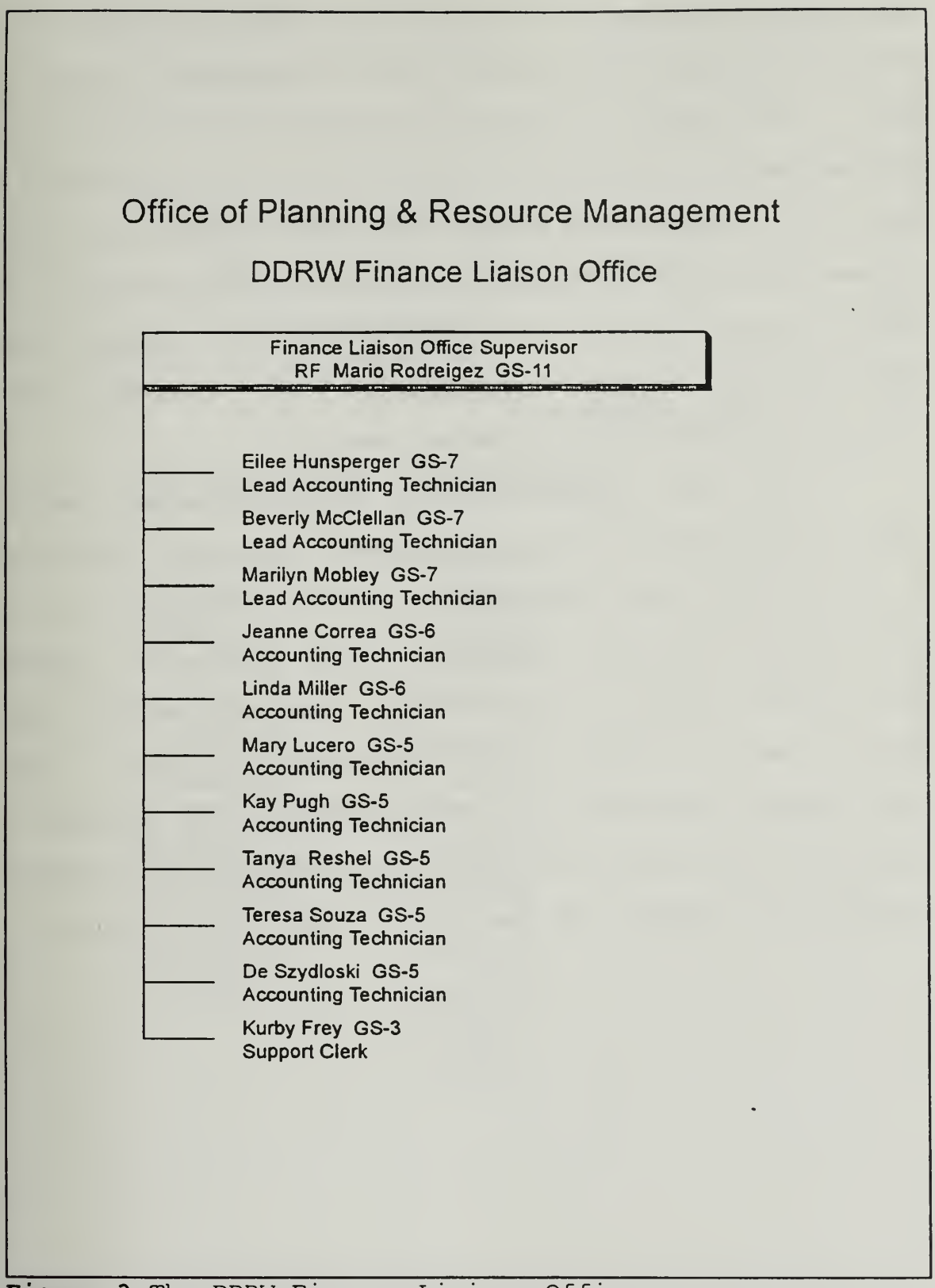

Figure 3 The DDRW Finance Liaison Office

has several management analysts whose main function is to conduct functional reviews and special management studies for DDRW. This section is the main section shouldering the ABC implementation. ROA's main output is the analytical work of the staff in two major areas. The first is the functional reviews, where work processes are analyzed. The second is the special studies--this is the general analysis category where other special interest analysis is done (disposal, base closure, warehouse consolidation, etc.).

The other section is the Work Measurement section (ROM). This section also has management analysts. Their role is to conduct work measurement studies in support of job descriptions and skill ratings. Their work also includes controlling inputs into the master account records which control the cost coding for different work functions. Their main outputs are work measurement studies for purposes of position classification and description and the master account records which update and classify the positions for DLA.

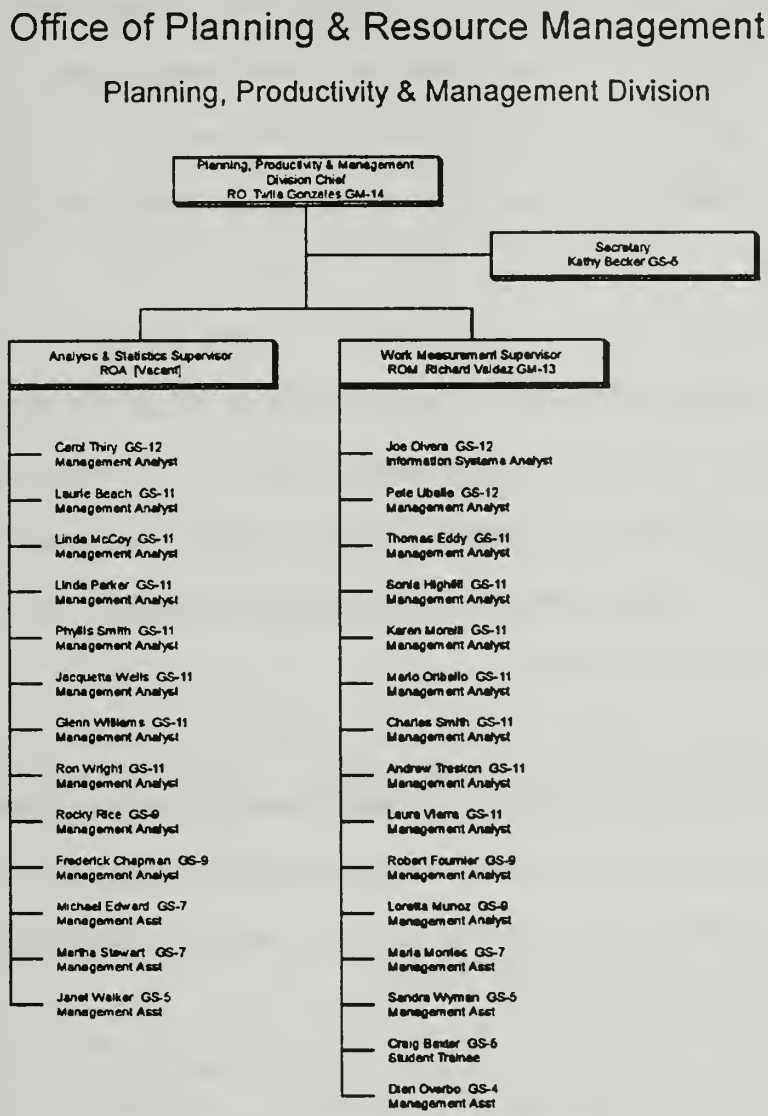

Figure 4 The Planning, Productivity & Management Division

B. BUILDING THE MODEL

Using the Sampling Corporation's Activity Based Costing software, *The Model Approach*™, and the information gathered about the Planning & Resource Management Department, a model of the department's processes can be developed. The model consists of activities of the organization and how these activities together form the processes and outputs of the organization.

Sampling's *The Model Approach*™ to ABC design is organized into eight steps similar to the eight step program DLA is utilizing for its ABC implementation. However the main distinction is the way information is put together for review and analysis. In summary, the eight steps of *The Model Approach*™ are as follows[11]:

- Identify the scope of the model. In this case, the scope is the Planning & Resource Management Department.
- Identify the activities, resources and drivers.
- Lay out a schematic. This step is where the model concept demonstrates its uniqueness.
- Identify and define data requirements and gather the data.
- Build the model either by drawing a schematic chart with the associated data, or as in this case, use the Sampling Corporation's *Net Prophet® II* software which aids in developing sound interrelationships between activities and

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[11]The Sampling Corporation, Implementing Activity Based Cost Management--The Model Approach™ Mississauga, Ontario, Canada: The Sampling Corporation, 199- 0.22.

how these activities impact each other in constraints and performance.

- Validate the model. In other words, check the results with the organization being modeled.
- Interpret the information derived from the model. This is the strength of the model. By being able to graphically represent the data collected and the flow of defined activities, management can make not only sound cost decision but also sound process and output decisions.
- Play "what if" scenarios. The model allows for ability to alter selected activities or resources in which management can review possible decisions in regards to processes and outputs. The software lends itself quite well to these scenarios.

To the extent practical, given the constraints of data collection, the aforementioned eight steps were followed in the development of this thesis model. After the scope was defined (the Planning & Resource Management Division), the activities were defined and the data was gathered. The model was then constructed using a single year planning horizon.

Consider the model to be an assembly line. View each of the activities as work stations on the assembly line. The goal for an assembly line is to produce a final product. For the model, the goal is to define the final product in terms of the resources consumed in the activities to produce it. Like assembly line work stations, the model adds value at each activity and at the end there is a complete accounting for the final product.

Figure 5 presents an overview of the model. Each of the activities are defined in terms of boxes. Just like an

DDRW Model

Overview

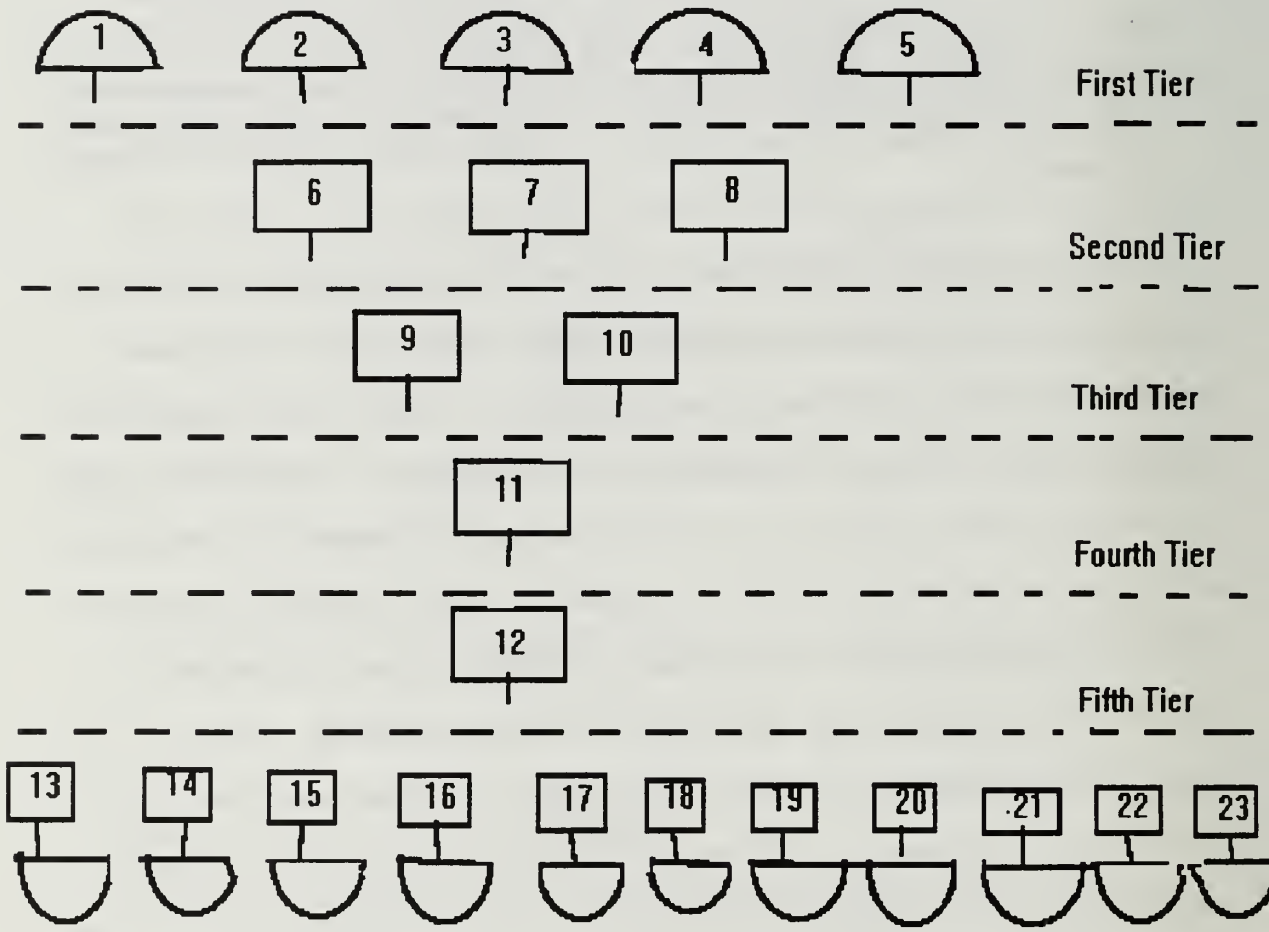

Figure 5

assembly line, in the beginning (or top) of the model resources or supplies are introduced. As the assembly line flows toward the end (or bottom) of the model, activities group resources together into higher order activities much like components are put together into subassemblies on an assembly line. Where different resources are introduced or how they are grouped together are decisions that are flexible and can altered to correspond directly to the actual work process or management programs.

For purposes of clarity, the model has been organized into tiers to allow the reader to follow the flow of the model. The model is composed of "boxes" that graphically represent the inputs and outputs of activities. The "boxes" could, in some cases, represent either an initial input of a resource (a supply box), or it could be a processor of inputs (from either supply boxes or earlier activity outputs). A box could also represent a final demand level which the final activity output meets.

The main purpose of a box is to define the usage level and flow of resources towards the final product. By defining the incremental use of different resources at each activity level a more accurate accounting of the final output can be derived. Similar to an assembly line, the outputs from an box could either satisfy a external requirement or demand or be utilized by a subsequent activity box.

The model starts the process with the first tier which represent supply boxes (inputs) which represent the resources available. The subsequent levels or tiers add additional inputs until the process produces the final output, which is paired with a demand for the final product or service.

1. The First Tier

The first tier of the model is the supply boxes or supply inputs needed for the subsequent activities. Supply boxes are represented by the computer software as upper half circles. In this particular model, the supply inputs are telephones, personnel salaries, office supplies, travel expense, and utilities & maintenance (Figures 6 & 7). Revenue resources or inputs are not a part of this particular model. However, if the DBOF concept of unit cost resource funding, as mentioned in Chapter III, were instituted, the model could be readily adapted. The model could incorporate the revolving fund "revenue" much the same way a private enterprise would. This could readily reveal to management whether the "total earnings" cover the total cost of operations. For private firms, the revenue resource becomes one of the models constraints. Costs would not be allowed to exceed spending unless an outside funding resource was stipulated. However for this model, since revenue resourcing has not been introduced, only expenses as constrained by budget limits will be utilized.

DDRW Model -- First Tier

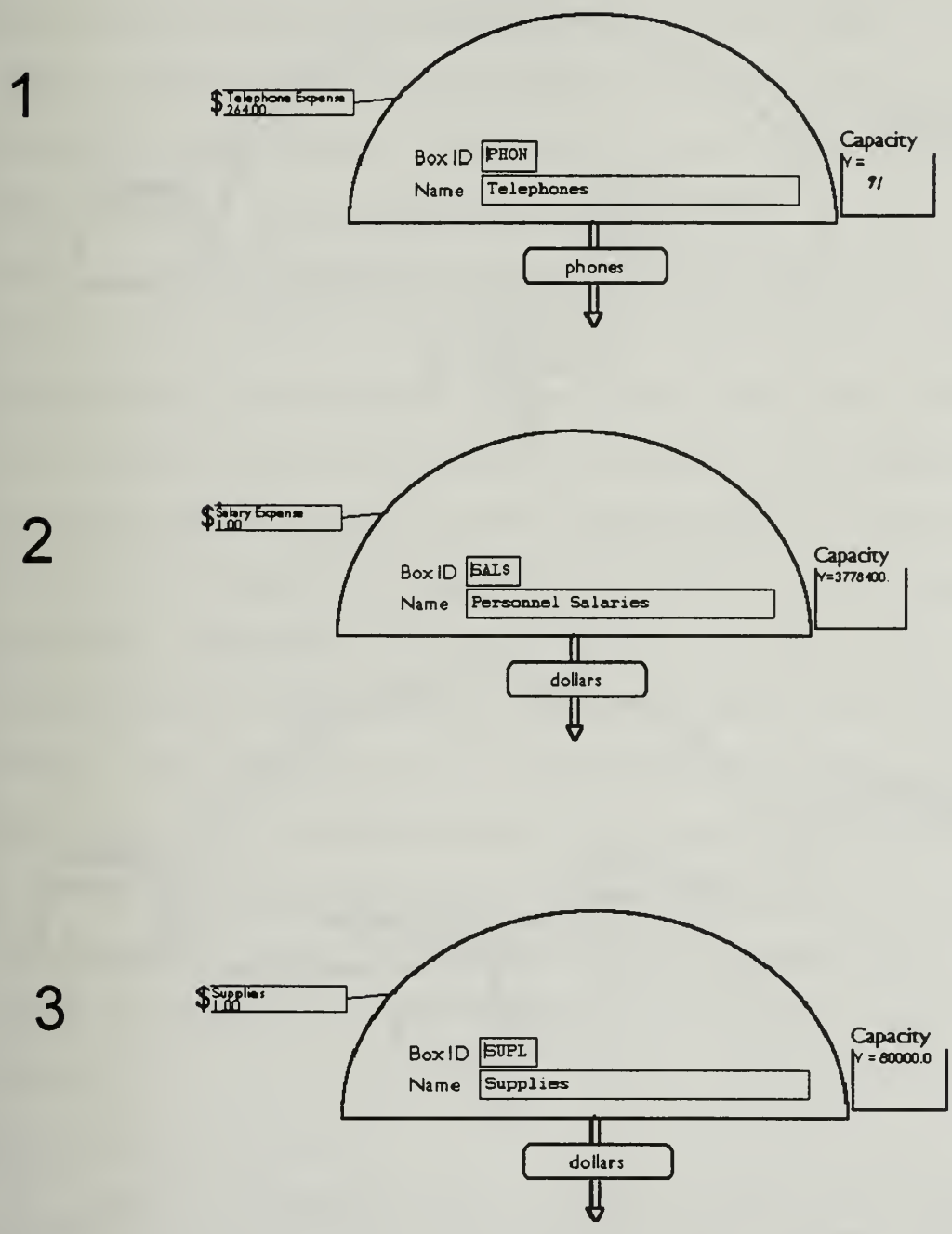

Figure 6

First Tier continued

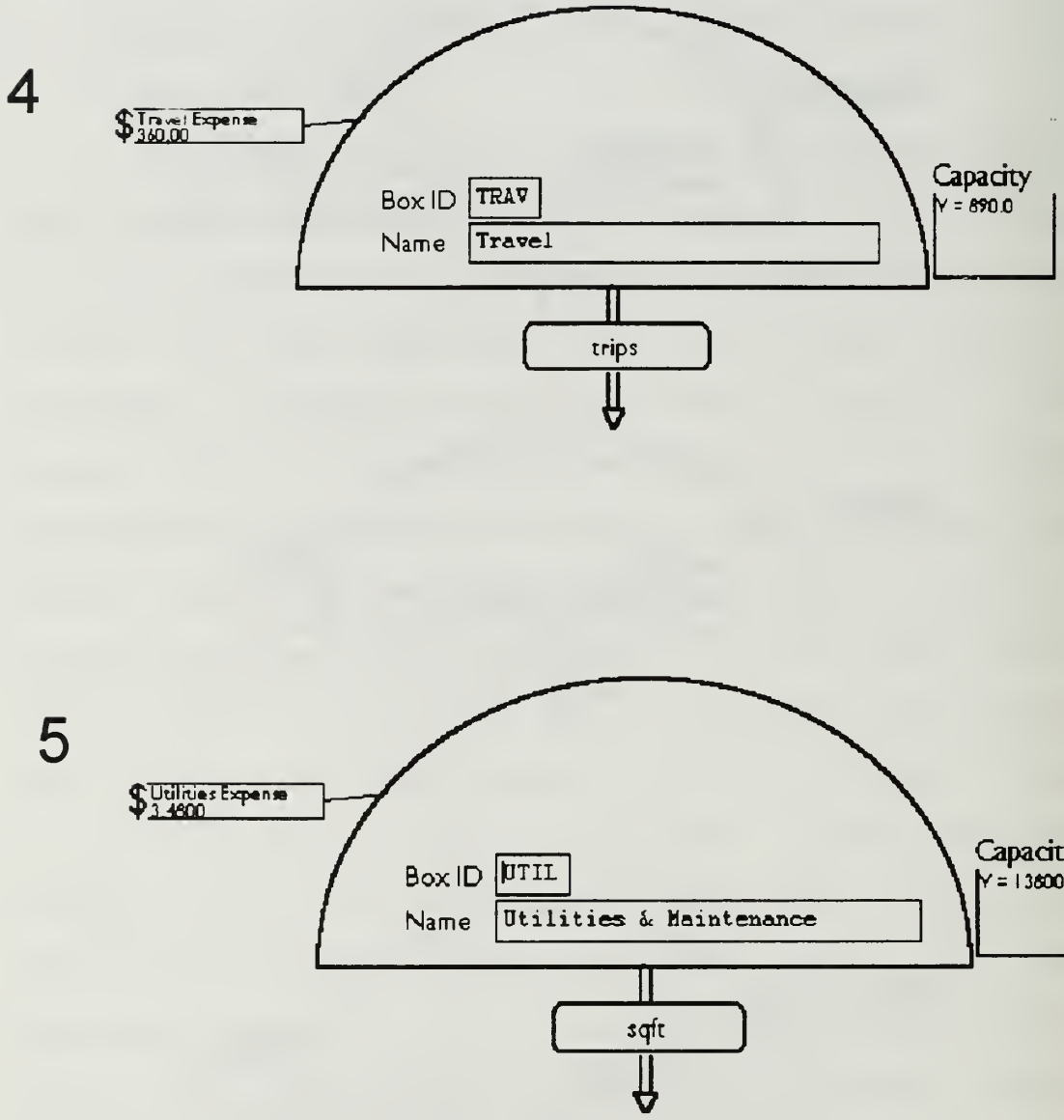

Figure 7

The first supply box is the Telephone box. The total number of phones currently available to the organization is 91, as defined by the capacity to the right of the half circle. The amount of money needed to operate a phone is $264 per year as defined by the data line to the left of the half circle. The output of this supply box is the number of phones currently being used. The output is constrained by both the needs for phones by subsequent activities and the capacity limit to the right of the half circle. The overall dollar value is the number of phones multiplied by the expense per phone which is delineated by the data line to the left of the half circle. The overall dollar value is not represented in the graphic but is part of the computations in the numerical print-outs located in Appendices A and B. The phone box provides information on the current availability of phone resources (91), how much it costs to operate one for a year ($264), and the output unit of measurement (number of phones). The output level is determined by how many phones are utilized in activities in subsequent levels (currently constrained by the capacity limit on phones - 91).[12] The actual output level is delineated in the print-outs located in Appendices A and B.

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[12]Use of telephones as a resource could also have been tracked in other ways, for example, by minutes used or by detailed accounting of long distance usage. However, detailed phone use information on individual phones is not readily available.

The Salary box is the next supply box. The salary box provides the payroll dollars for the department employees. To the right of the salary box is the salary expense capacity (as set by the budget). Since the output is dollars and not some other form of measurement (for example, number of workers or work hours) no conversion value is necessary. Therefore the data line to the left of the half circle is set at one dollar so that the dollar value of the output is the numerical output value. Again output flow will be determined by input needs for subsequent activities. Output will be also constrained by the capacity value to the right of the half circle.

The next box is the Office Supplies box and it too is constrained by a budget limit. Its output is also defined by dollars, similar to the Salary box. In this model no single office supply item was significant enough for separate designation and therefore the office supplies were grouped together.

Travel is the next box and its capacity is based on the number of trips allowed by the DDRW organization for the department. The average cost per trip, the number of trips per individual, and time out of the local area led to these policy guidelines though exceptions are readily made for special circumstances. The output is measured by the number of trips. The value for each of these outputs is defined by the data line to the left of the half circle ($360.00 per

trip). The total number of trips allowed (capacity) is delineated to the right of the half circle (890 trips).

The last supply box is the Utilities & Maintenance box. Since cost for upkeep and utilities are expensed by the cost per square foot ($3.48 per square foot as delineated by the data line to the left of the half circle), the output for Utilities and Maintenance is square footage. The capacity for the square footage is based on the allotted office space for the department. The value of the output is the amount of square footage multiplied by the expense per square foot. Again the amount of square footage utilized will be based on the usage needs of subsequent activities.

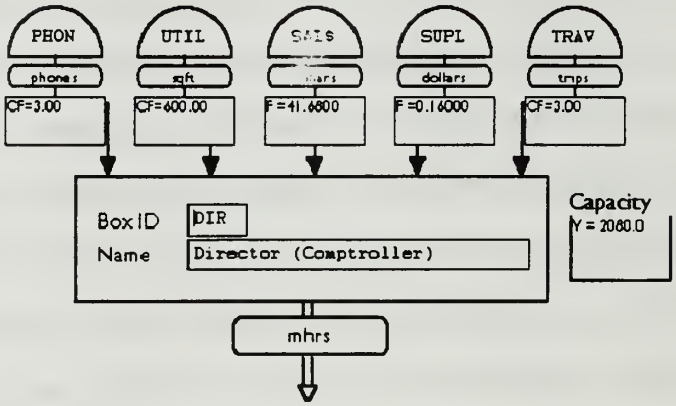
2. The Second Tier

The second tier (Figure 8) is the first level of *activities* utilizing the supply boxes' outputs. The first box is the Comptroller box. The Comptroller box takes inputs from the phones (two phone lines and a fax phone line for three phones total), utilities (office space used), salary, office supplies, and the number of trips taken (three trips).

The inputs shown at the top of the box gives its unit of measurement and its multiple factor. The multiple factor can either be a constant number or value (labeled constant factor or "CF") or an output rate based factor in which the input number is based on the volume of output (labeled fixed factor or "F"). For example, the phones (labeled "PHON")

DDRW Model -- Second Tier

6



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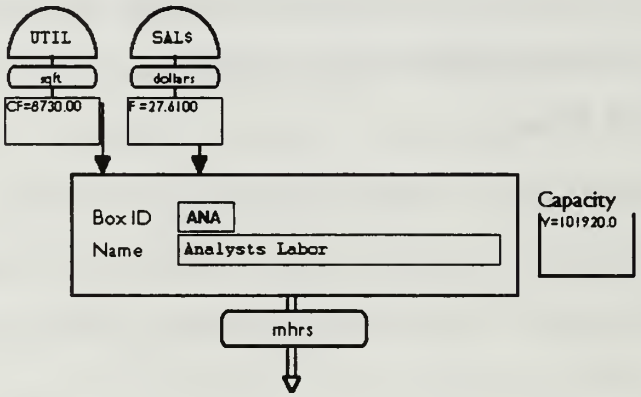

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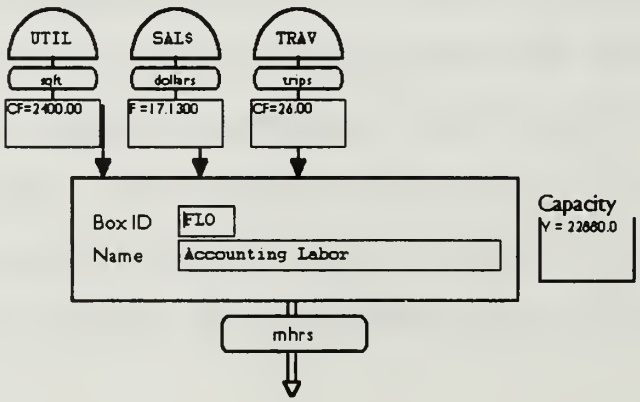


Figure 8

input has a unit of measurement (number of phones) and it is computed with a constant factor (CF=3.00). The Comptroller has three phone lines regardless of his output in manhours. However, the office supplies (labeled "SUPL") input is a fixed factor. The comptroller utilizes sixteen cents of office supplies per manhour of output. All inputs are designated by their name, unit of measurement, and their multiple factor (either fixed or constant).

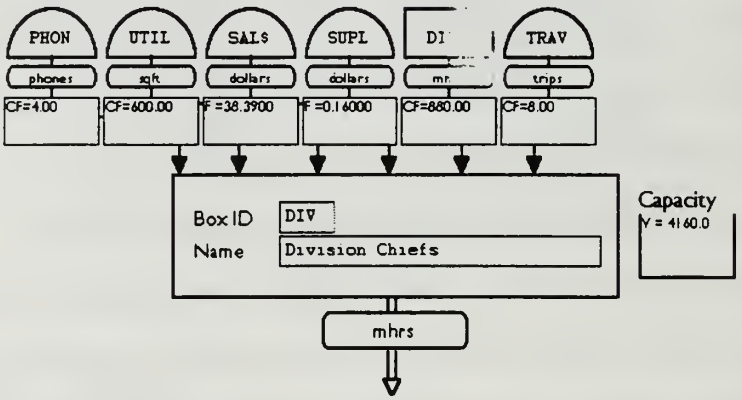
The comptroller box's output is the comptroller manhours available for supervision, constrained by the number of manhours the comptroller (a civilian) can work on an annual basis. The other two boxes on the second tier provide the manhours available for the analysts (both management and budget) and the accounting technicians. The monetary value of each of these outputs (all manhours) is based on the monetary value of the inputs utilized.

3. The Third Tier

The third tier (Figure 9) develops the manhours for the division chiefs taking as inputs the supply boxes and supervision from the comptroller. The third tier also develops the Training activity for department personnel. The training box takes inputs from travel (number of trips allowed for training), utilities (classroom/meeting room space), general supplies, and manhours from supervisors, analysts and

DDRW Model -- Third Tier

9



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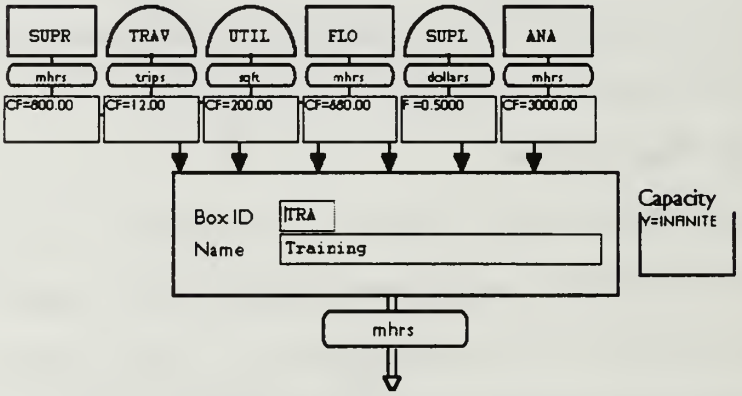

Figure 9

accounting technicians. The output in manhours captures the value of the necessary training.

4. The Fourth Tier

The fourth tier (Figure 10) incorporates the secretarial services based on the inputs from the secretaries' salaries and supervision from the both the comptroller and the division chiefs. Their supplies and phones values were already rolled up in their supervisors manhours. The hours used as the annual factor for the supervision was based on data gathered through interviews. The secretaries' services (output in manhours) become inputs for the section supervisors. Decisions on where values are introduced in the model are similar to decisions on where components are assembled on a assembly line. This illustrates the dynamic qualities of the model. Management's understanding of the process drives the model's structure, not accounting allocation methods. In the case of the secretarial services, it seemed logical to introduce their services and costs just prior to the first line supervision activity. The secretarial services provided for the director and division chiefs aid in the supervisory support the section supervisors receive. Therefore the secretarial services output then becomes an input for the first line supervision activity in the next tier.

DDRW Model

Fourth Tier

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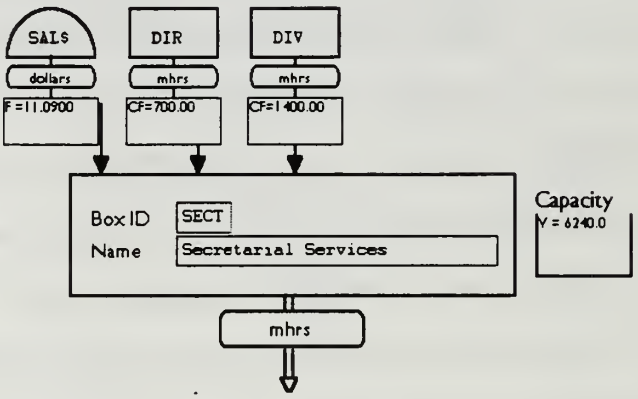

Fifth Tier

12

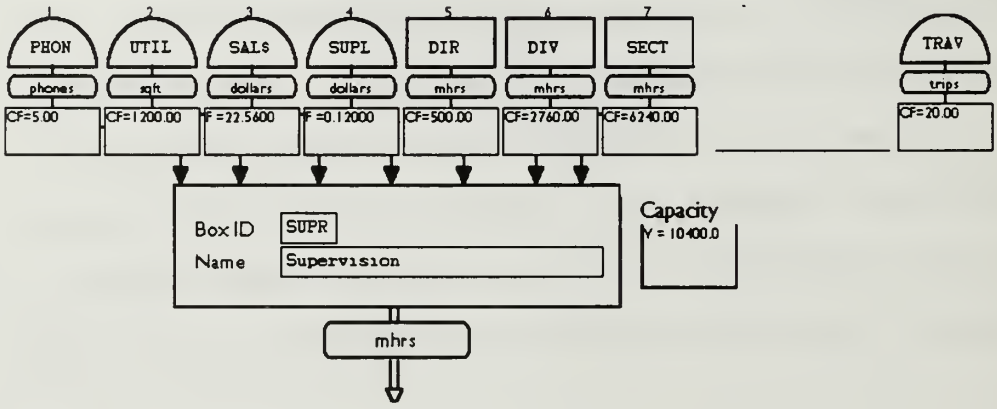

Figure 10

5. The Fifth Tier

The fifth tier (Figure 10) puts together the section supervisors' (or first line supervision) output. Besides their supplies boxes, they also get supervision input from their superiors and benefit from the secretarial services for the department. Again capacity is based on the number of supervisors and their annual number of manhours available.

6. The Final Products and Matching Demands

The final tier is the completed product or service and the matching demand level they satisfy. In some cases these last processes had special equipment purchases added on for these final activities. The reason the special equipment purchases are added at this point in the model is because the equipment is unique and exclusive to this particular activity. Notice how the these activities do not have capacity levels. The capacity level has already been defined by the earlier tiers and their constraints. They also will only output to the demand levels set by the demand boxes (lower half circles).

Figures 11 and 12 represent the final level of activity for producing the work for the Management Information System project and Unit Cost summaries in the Analysis and Review section of the Program Budget division. Figures 13 and 14 represent the processing of depot and region accounts in the Budget section of the Program Budget Division.

DDRW Model

Final Products & Matching Demands

Analysis & Review Section

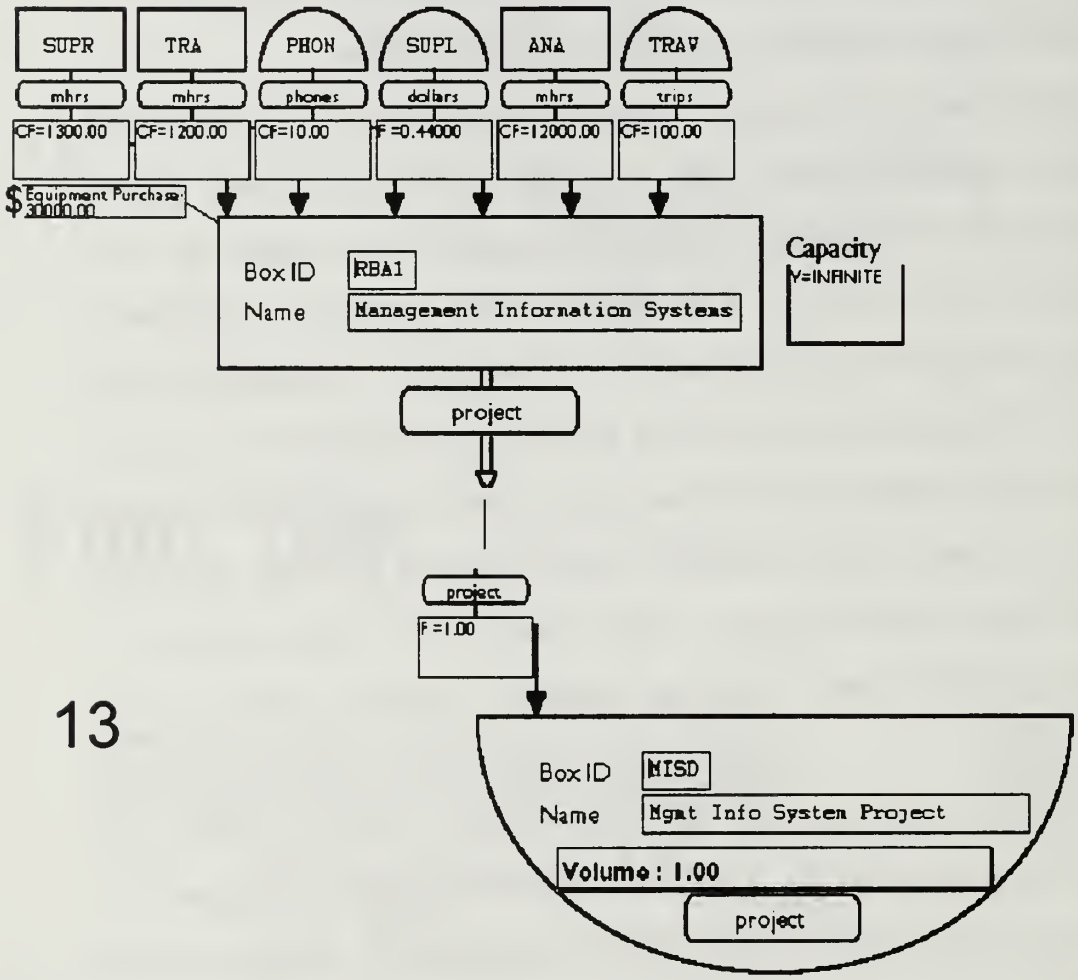

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Figure 11

DDRW Model

Final Products & Matching Demands

Analysis & Review Section

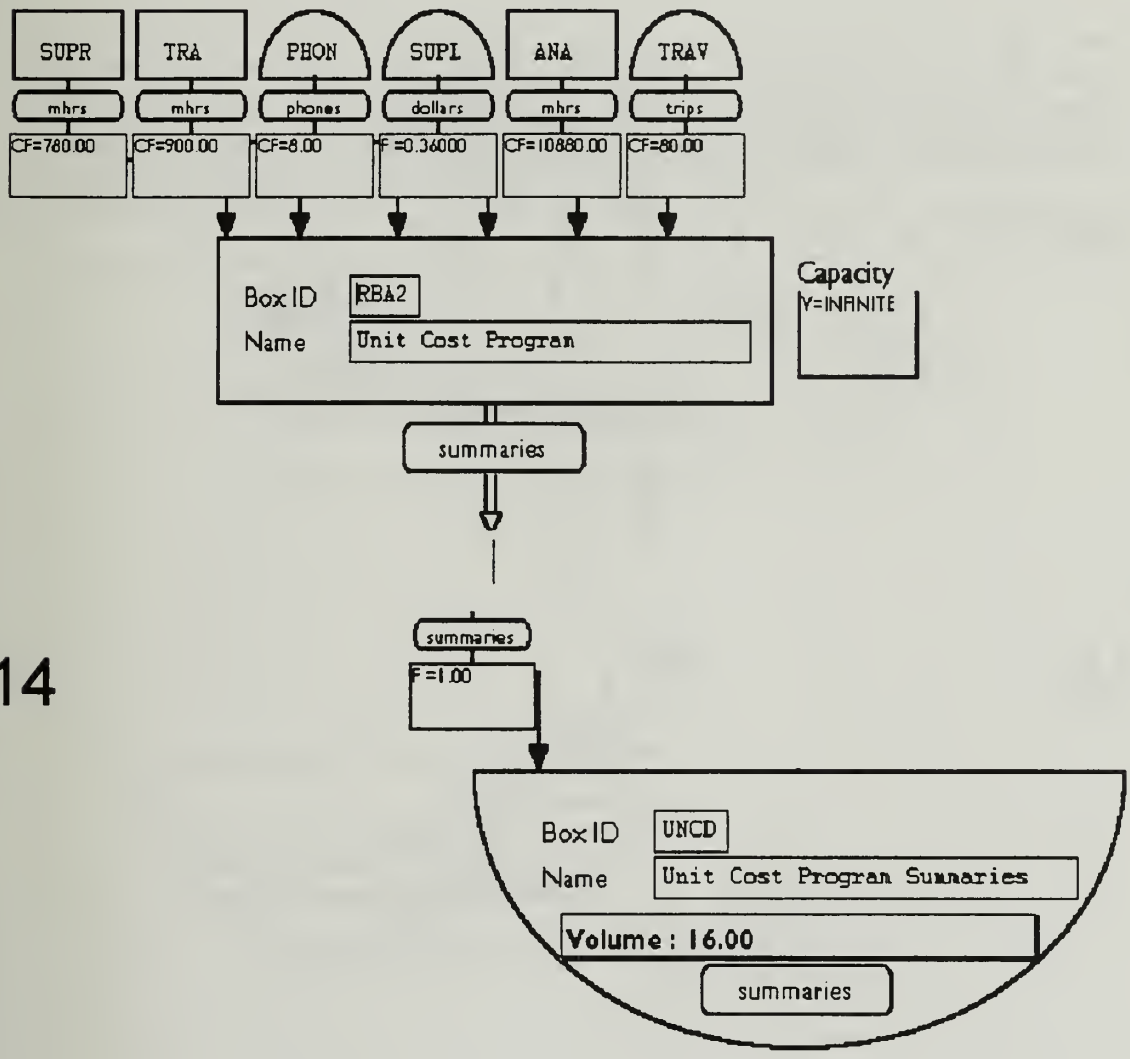

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Figure 12

DDRW Model

Final Products & Matching Demands

Budget Section

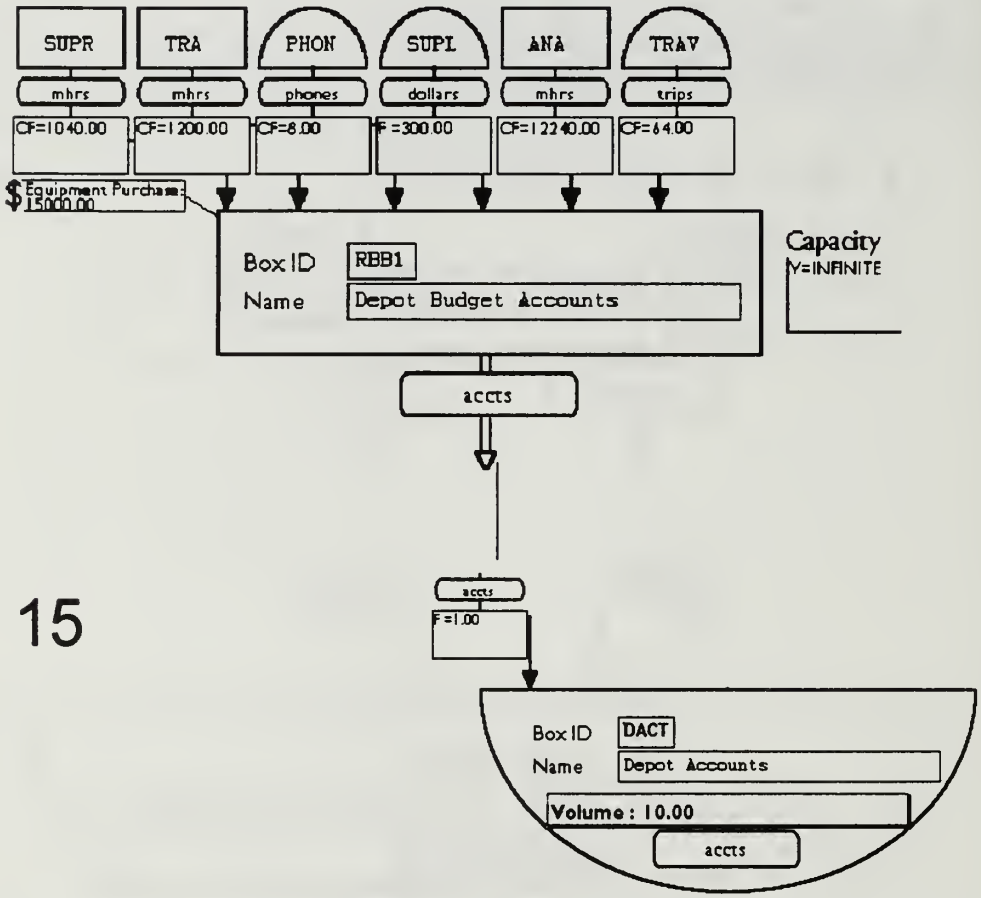

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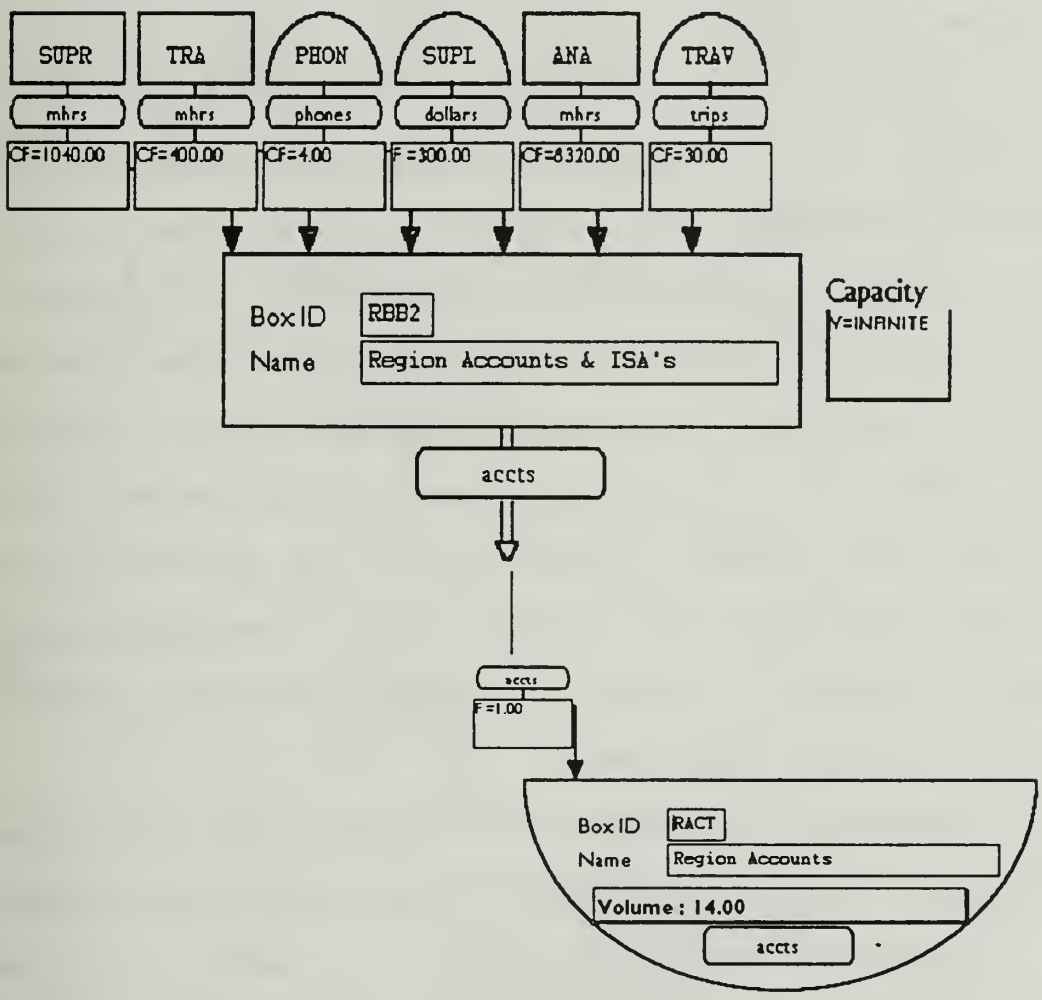
Figure 13

DDRW Model

Final Products & Matching Demands

Budget Section



16

Figure 14

Figures 15, 16, and 17 represent the three demands and final level activities for the outputs of the Finance Liaison Office. Figures 18 and 19 show the final outputs (functional reviews and special studies) of the Analysis and Statistics section of the Planning, Productivity and Management division. Lastly, Figures 20 and 21, present the final outputs of the Work Measurement section of the Planning, Productivity and Management division.

The output of these final activities is also driven by the demand or need already established for these activities. By having the demand level set the output levels of the final tier, resource consumption will be revealed in the model. The activities in the model will not produce more than the demand based on the defined relationships between inputs (from either supply boxes or earlier process boxes) and processes. Instead any additional product capability will be defined as excess (or idle) capacity which itself can be established as an output. Figures 11 through 21 present the final product and services from the department.

Appendix A presents the financial data and capacity utilization based on the model. Pages 84-86 give a summary of flow utilization and the total cost of each of the boxes. Page 84 is a list of the supply boxes in the first tier of the model. Page 85 is a list of the process boxes and Page 86 is a list of the final demand boxes. An expense breakdown for the model is given on pages 87-88. Flow utilization of

DDRW Model

Final Products & Matching Demands

Finance Liaison Office

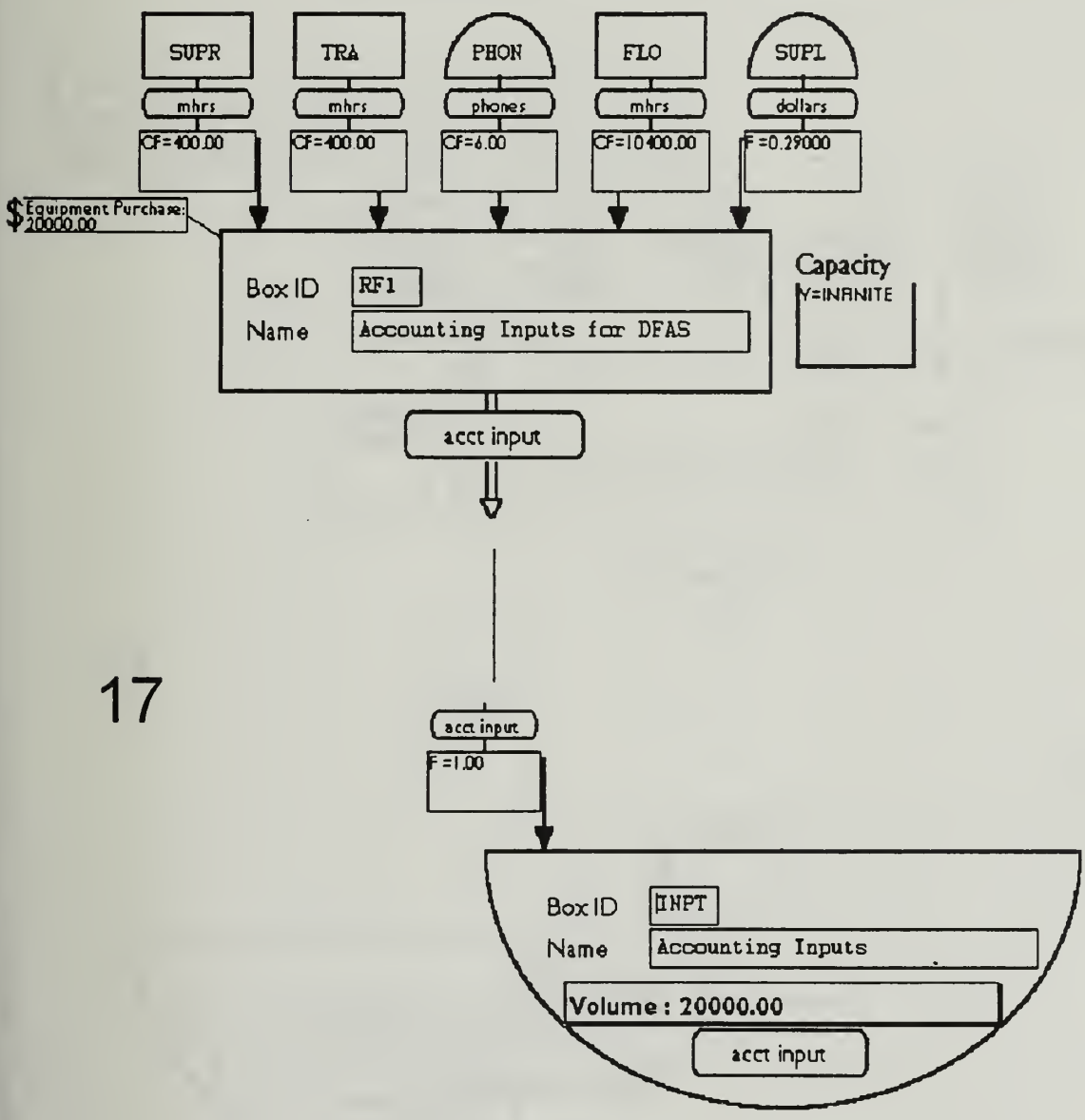


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Figure 15

DDRW Model

Final Products & Matching Demands

Finance Liaison Office

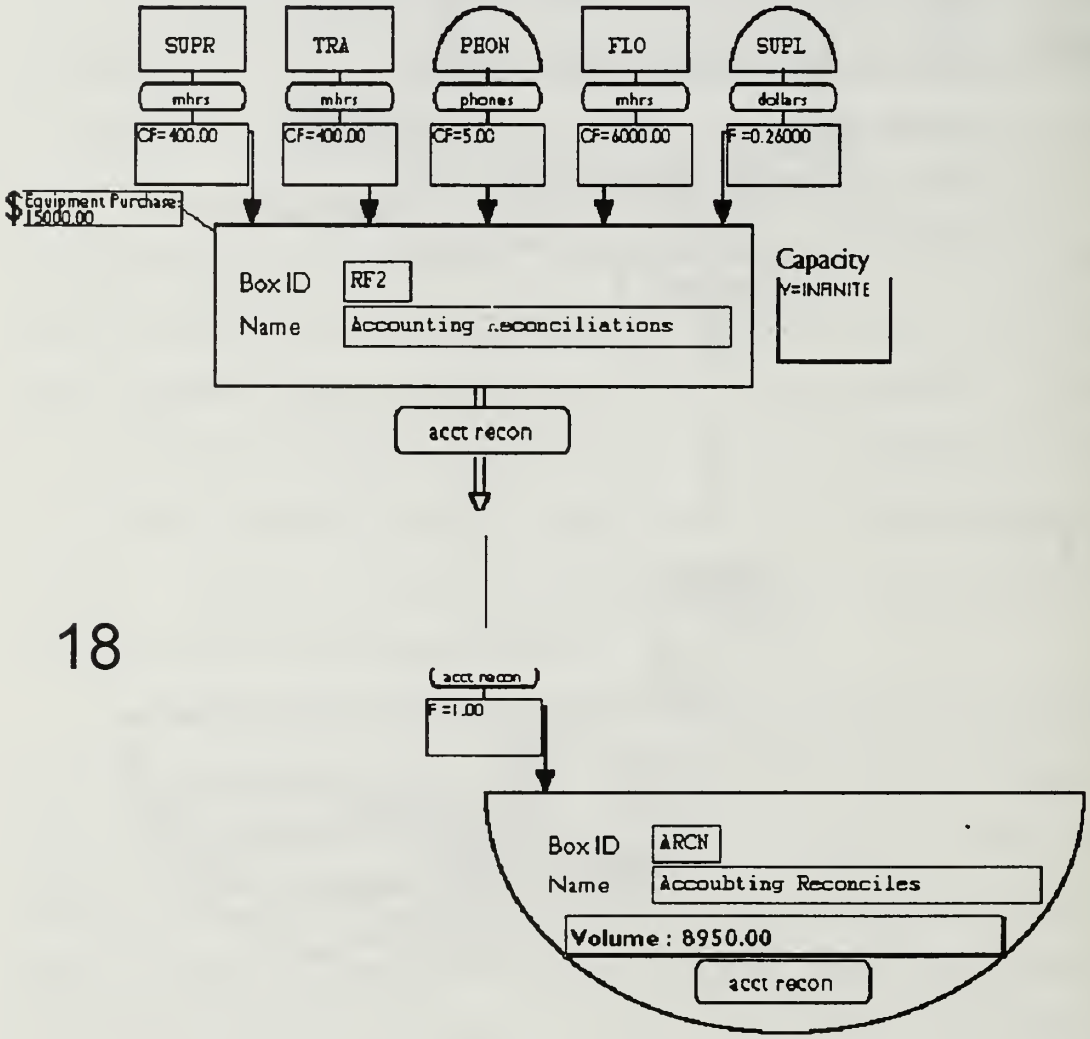

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Figure 16

DDRW Model

Final Products & Matching Demands

Finance Liaison Office

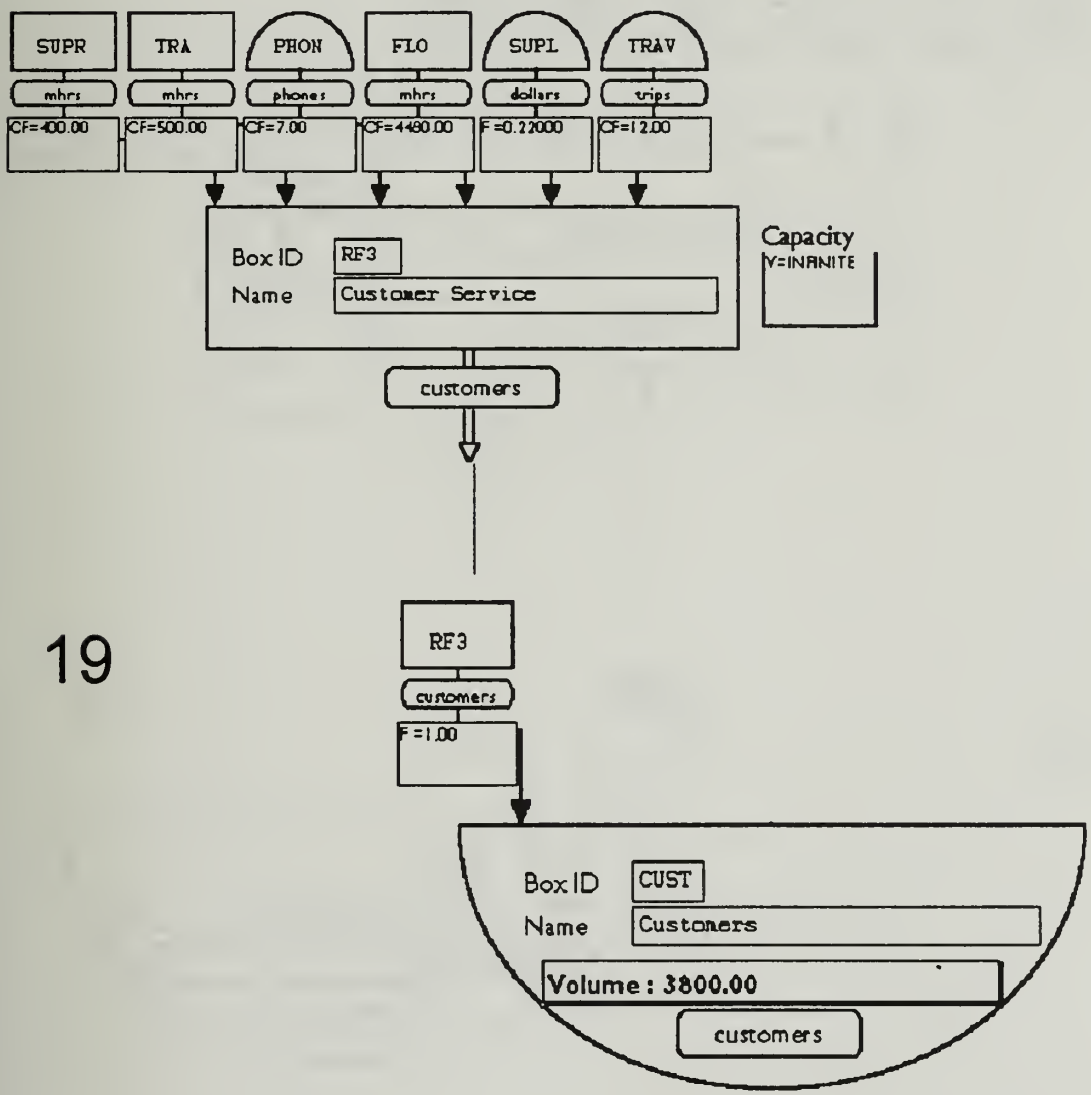

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Figure 17

DDRW Model

Final Products & Matching Demands

Analysis & Statistics Section

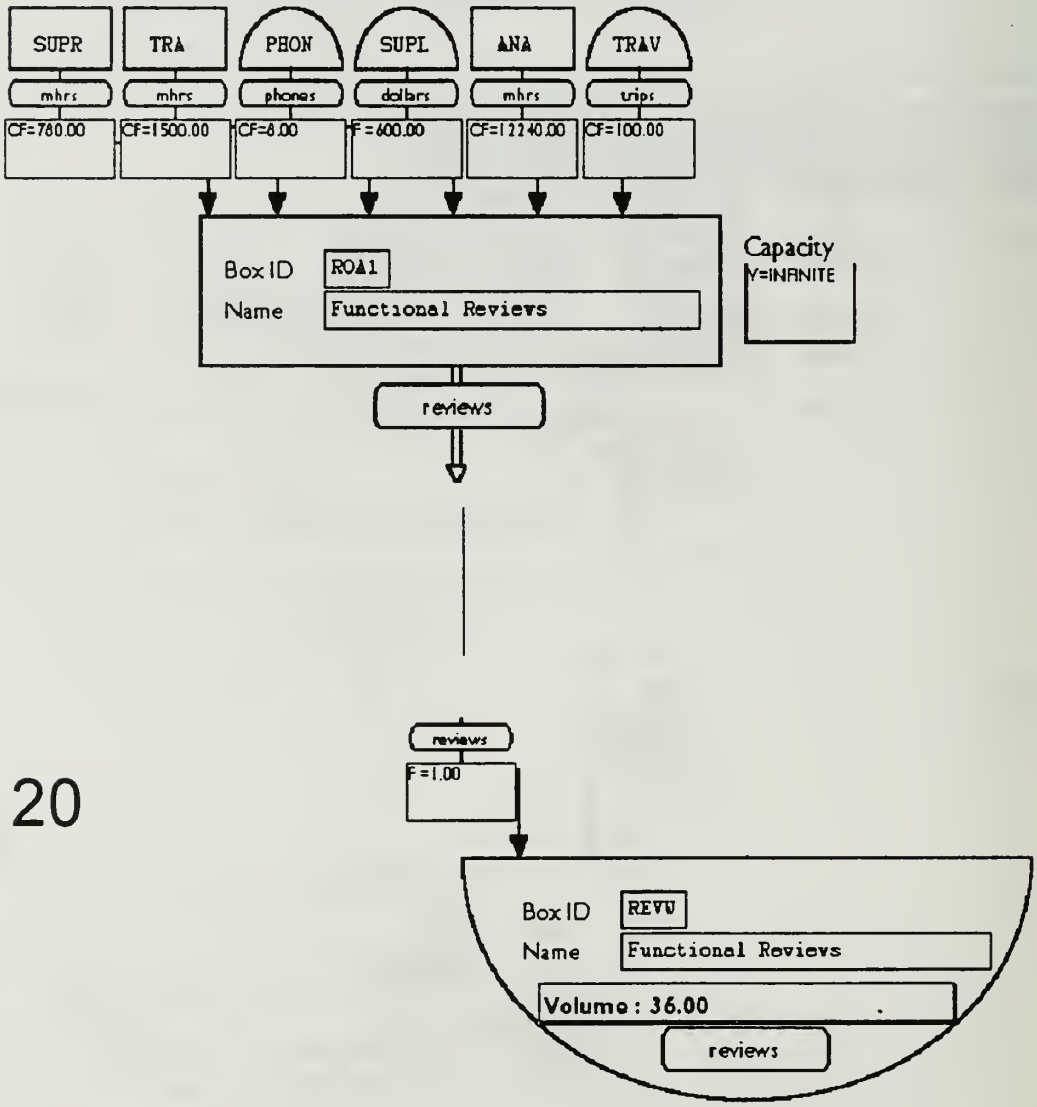

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Figure 18

DDRW Model

Final Products & Matching Demands

Analysis & Statistics Section

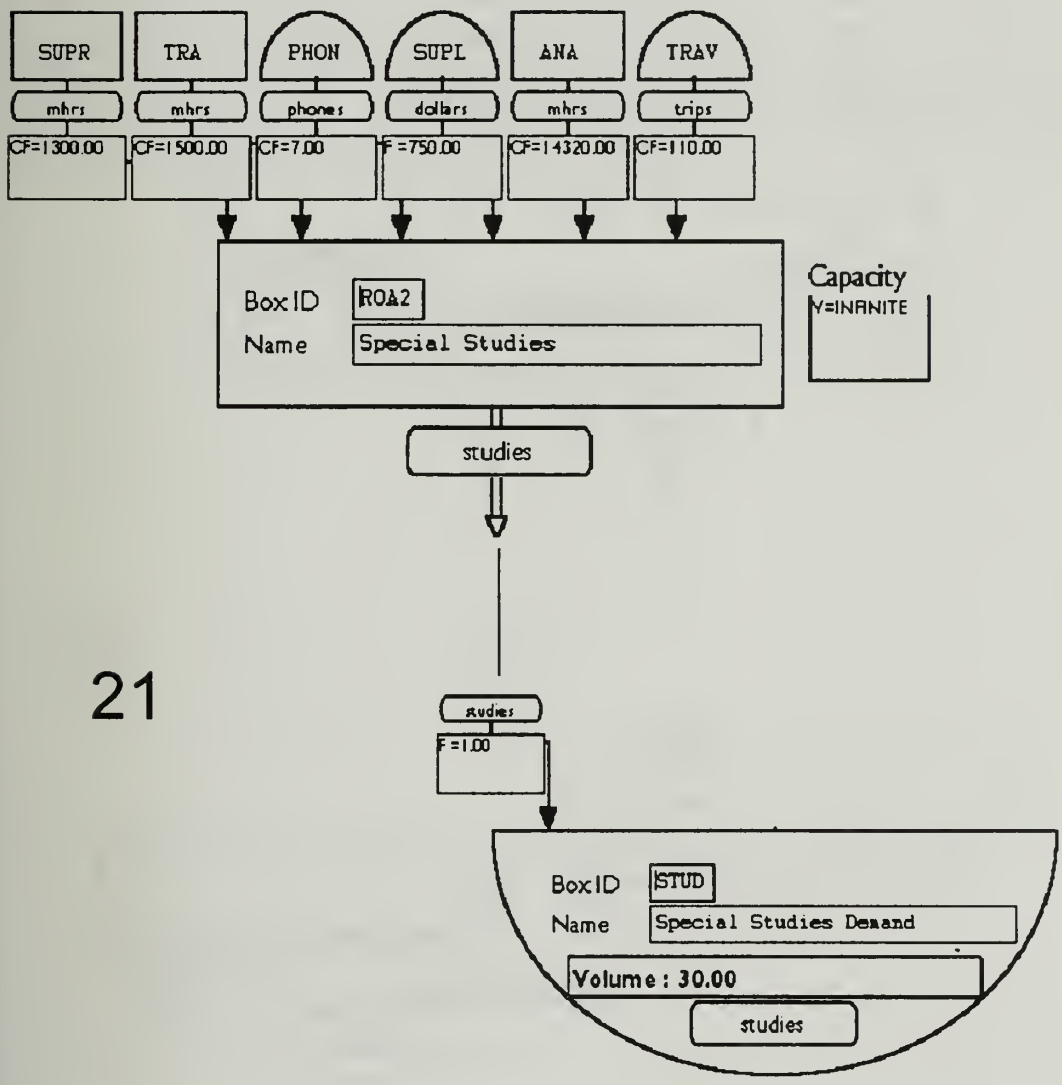

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Figure 19

DDRW Model

Final Products & Matching Demands

Work Measurement Section

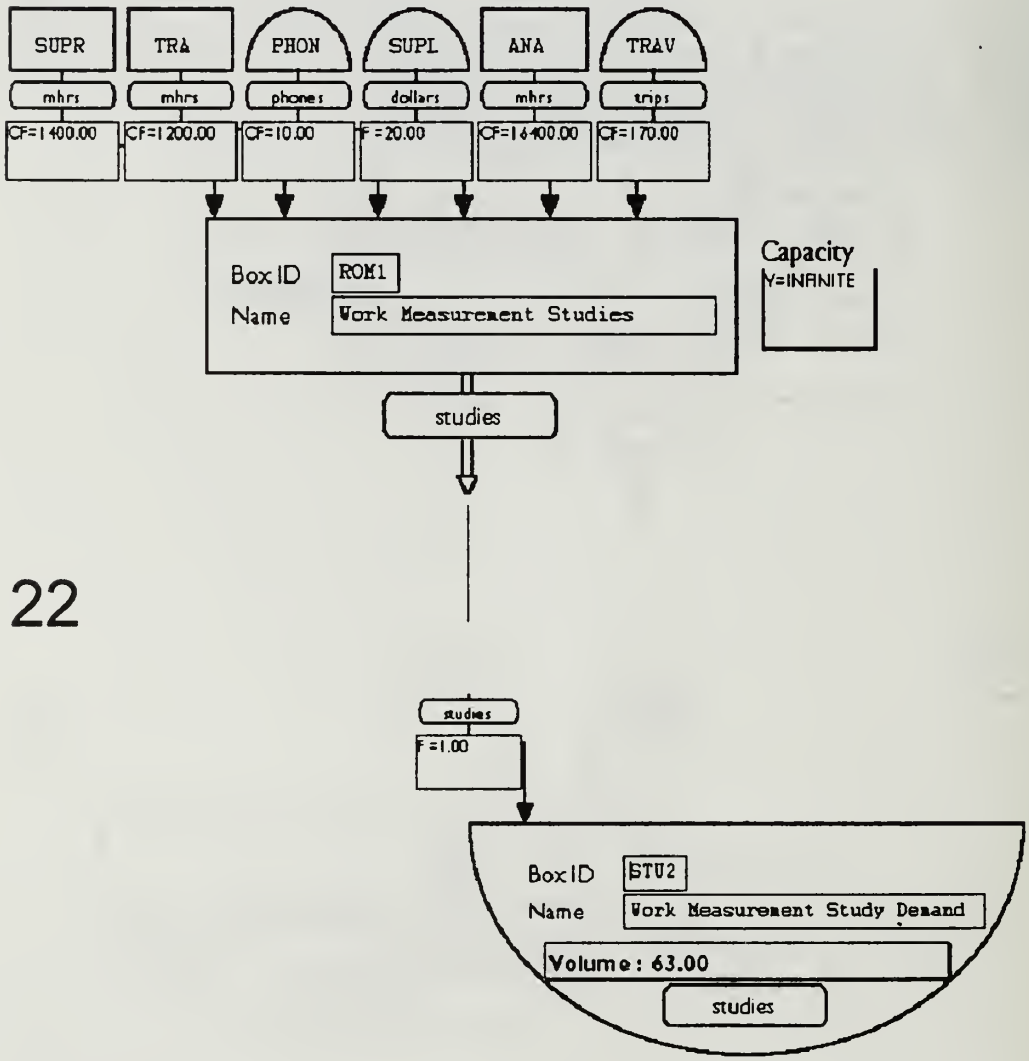
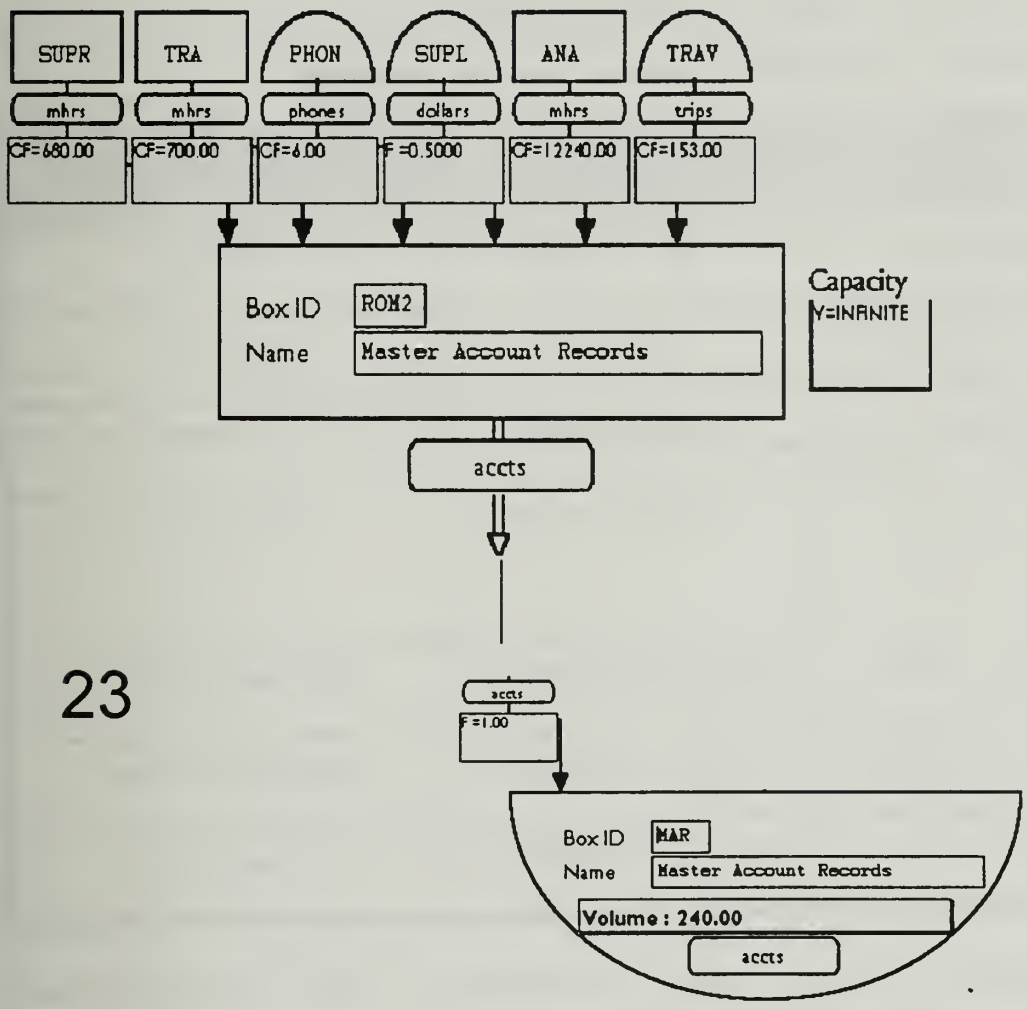


Figure 20

DDRW Model

Final Products & Matching Demands

Work Measurement Section



23

Figure 21

available resources are given in the "Detailed Flow Results Report" on pages 89-96. This report presents the amount of output that "flows" through model based on the constraints and capacities of the model. This report is the most important for the further study of the ABC impact in that it identifies any excess capacity available to handle the ABC impact. Table 1 summarizes the excess capacity available.

TABLE 1: SUMMARY OF EXCESS CAPACITY AVAILABLE

Box	Capacity	Excess Available
Salaries	$3,778,400	$953
Office Supplies	$80,000	$1,974
Travel	890 trips	2 trips
Utilities & Maintenance	13,800 sq ft	70 sq ft
Analysts Labor	101,920 manhours	280 manhours
Accounting Labor	22,880 manhours	1120 manhours
Supervision	10,400 manhours	80 manhours

Pages 97-146 give individual unit revenue/cost breakdowns per model box.[13] The costs are broken down into fixed and variable. Variable costs are the costs dependent on

[13]Since revenues were not introduced in this particular model. The revenue/cost reports are strictly cost reports.

the volume of output for the activity. The unit cost is the monetary value derived from the model's unit of output.

C. MODEL SCENARIOS

With a baseline model established, managers now have the ability to manipulate data and inputs, reexamine activities and modify cost drivers. The strength of *The Model Approach*™ software baseline is its dynamic flexibility and ability to play "what if" scenarios.

In the next chapter, the model for the Planning and Resource Management Department will be used to play a "what if" scenario to examine the impact of providing the necessary output to support the implementation and operation of the ABC system within the Planning and Resource Management department.

V. ANALYSIS

In this chapter, the impact of ABC on the Planning and Resource Management department will be introduced to the model and the results examined. The model will then be modified to accept the ABC impact and the solution presented. Other possible department solutions for handling the ABC impact will also be presented.

A. THE ABC IMPACT

The ABC implementation plan has been an ambitious one. It involved developing standardized activities for DLA for consistent relative analysis and gathering of initial cost data and work measurement through established accounting data, work measurement studies, and supervisor interviews. The initial set up for Activity Based Cost Management (ABCM) was established in April 1994. The main impact for sustained operations of the Planning & Resource Management department falls into three areas. The first area will be the financial data collection, which is anticipated to be handled by the Finance Liaison Office as part of its accounting workload. The second area will be the breaking down of budget reports to appropriate activity levels. The Budget Section of the Program Budget division will have the budget analysts involved with this area. The third area will be the productivity data

collection and the integration of both the productivity and financial data into a yet-to-be-designed software system. The management analysts of both sections of the Planning, Productivity and Management division will be involved in this area.

For purposes of this model, the long term operational impact of ABC can best be anticipated in the number of manhours utilized. Though, for modeling purposes, it would be better to have a set of tangible outputs such as reports, summaries or data collections, such outputs have not been yet been formulated. However, the amount of time and resources for the ABC project can be reasonably predicted and this information can be used to assess the overall impact. Based on 1994 labor cost codes and interviews with personnel involved, average yearly figures were forecasted. With the basic model already established, a scenario which allows data to be manipulated for "what if" situations can be created.

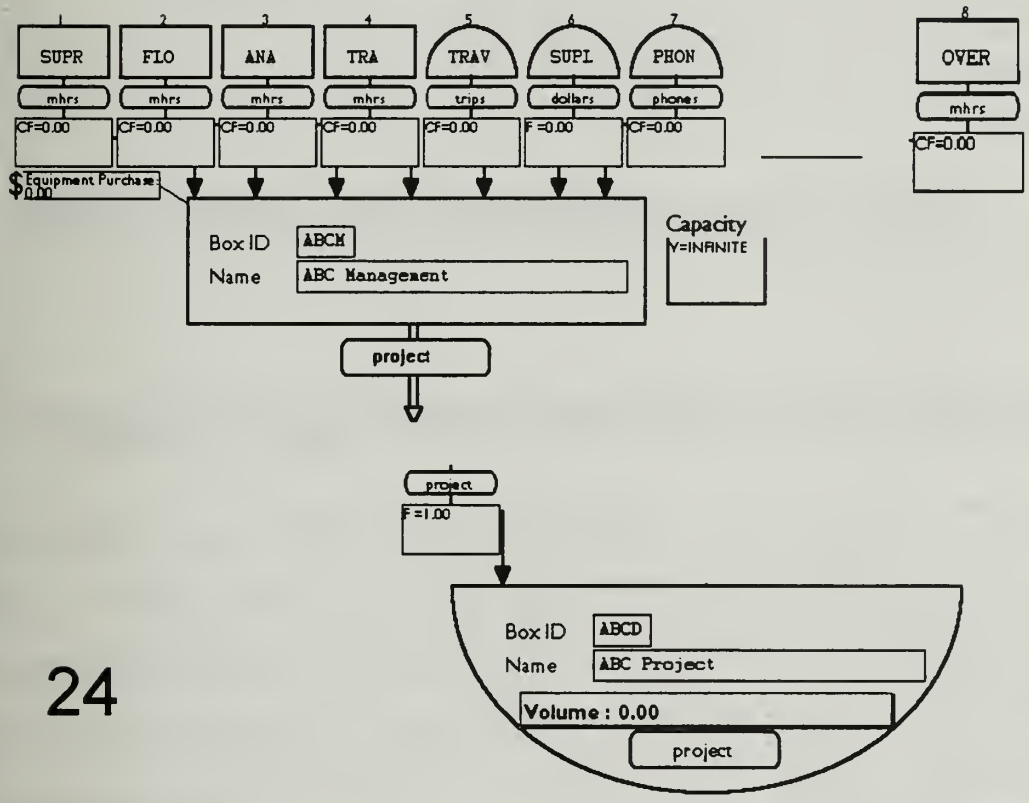
In the "ABC Impact" scenario, three new boxes are added to the model. Two of the new boxes are presented in figure 22. One box is the final process box for creating the output needed for the ABC Management project, which for the scenario purposes will be simply the "ABC project". A second corresponding demand box (lower half circle) representing the ABC project requirements is also graphically shown. A third process box representing overtime manhours will be discussed later.

Notice the inputs into the ABC Management process box. Supervision manhours, accounting technician manhours, analyst manhours, training manhours and the possibility for overtime manhours are all contributing to the ABC Management project. Supplies, travel & phones also add their resources to the cost of the ABC project. A new computer system needed for ABC tabulation is noted under the Equipment Purchase, though its cost, as with all the inputs, has yet to be included. The capacity constraint to the right of the box is set at infinite because any limitations for the ABC process will be from input flows from the earlier activities. Currently all input factors are set at zero.

The lower half circle is the final demand box for the ABC project. Again for scenario purposes, since the ABC project at DLA does not yet have a tangible output in the form of reports or summaries, the entire ABC Management process box's output meets the demand, "ABC project". However, when the output reports and requirements are finalized, a more definitive output and demand criteria could be established, after the ABC program goes on line and real measurements can be taken.

The third and last box (Figure 23) added was an overtime process box to be utilized as an option to handle the ABC workload. This box receives input from the salary supply box and provides additional manhours for subsequent activities.

DDRW Model
ABC Requirements



24

Figure 22

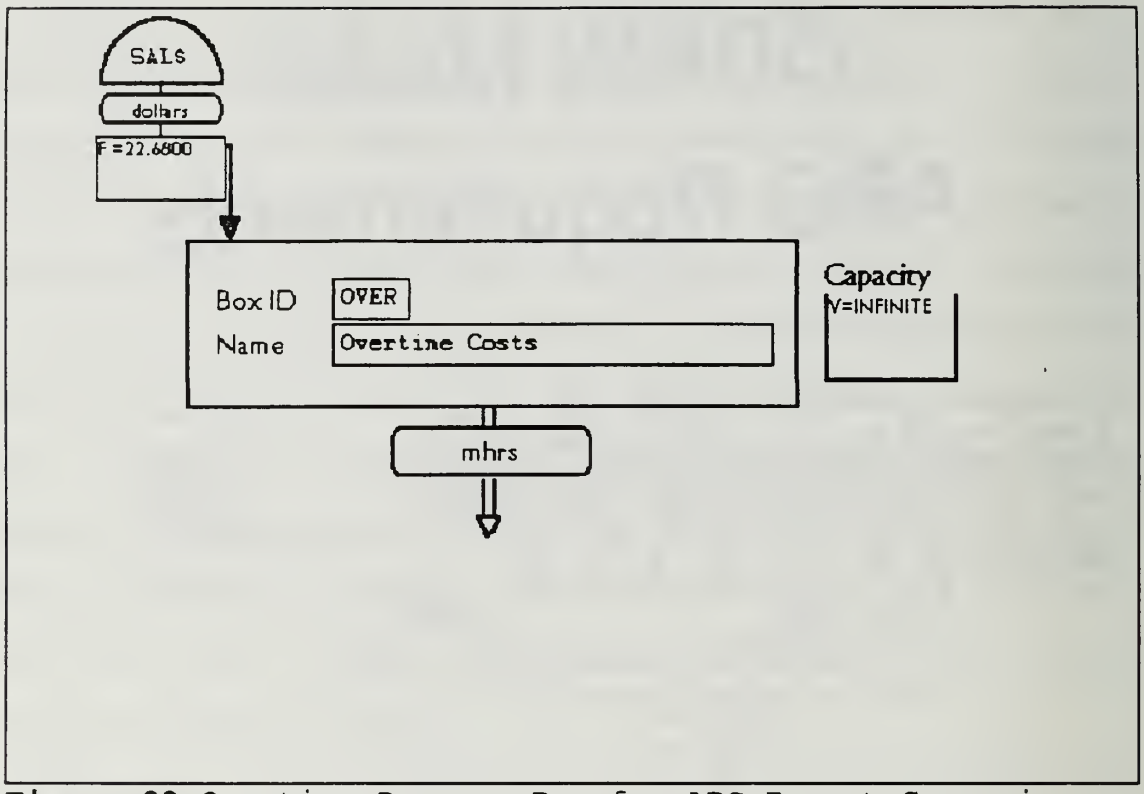


Figure 23 Overtime Process Box for ABC Impact Scenario

The next step is to establish the number of manhours needed for the ABC Management project. This number, as mentioned earlier, is based on both the cost code data already tabulated for the year and projected annual estimates based on site interviews. When the project's work measurement manhour numbers and their necessary support from other activity outputs are placed in the model, the computer will recalculate the model and present the results.

In this particular case, when the ABC impact scenario was introduced into the model, the result was five broken constraints. A broken constraint occurs when activity requirements exceed the resources available and therefore a

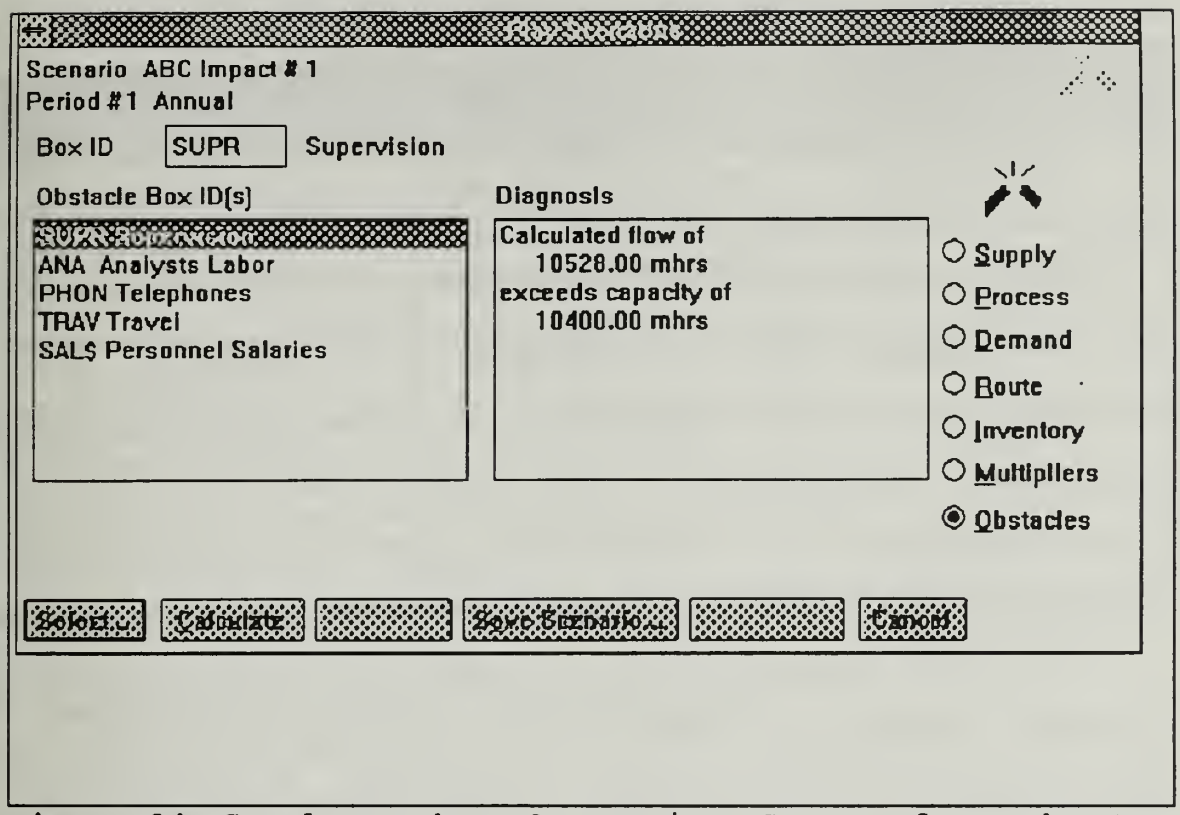


Figure 24 Sample Broken Constraint Screen from the Net Prophet™ software

resource capacity (or constraint) is exceeded. In other words, the model functions were using more resources than were available in five output areas. Figure 24 is a sample of the results the modeling software reports when the ABC impact was introduced to the model. In the sample, Supervision is shown as one of the five broken constraints with required supervision manhours exceeding the existing capacity. All five broken constraints are a result of the addition of the ABC workload. Table 2 summarizes the broken constraints.

TABLE 2: SUMMARY OF BROKEN CONSTRAINTS FROM ABC

Obstacle Box	Calculated Flow	Exceeds Capacity of
Supervision	10,528 manhours	10,400 manhours
Analysts Labor	109,244 manhours	101,920 manhours
Telephones	92 phones	91 phones
Travel	894 trips	890 trips
Salaries	$3,947,431	$3,778,400

With these broken constraints identified, the next step is to modify the model to handle the new workload and rectify the broken constraints. This might include either identifying the need for additional resources or downsizing other requirements or activities. This is where the model concept really pays off for management. It provides financial data, resource data and flow utilization data and then allows management to manipulate the scenario to try different approaches. As management tries different approaches to mitigate the problems, the model immediately recomputes and identifies any technical difficulties, such as other resource shortages. If the model has enough reserve capacity to handle the process or demand changes, the model will simply accept the changes and recompute its numbers. The model's versatility makes it a great management tool for comparing alternative solutions. Coupled with the ABC approach, the model provides not only

activity information but also the cost data involved. The model takes the ABC information and ties it directly to the collection of activities and then allows management to manipulate the activities. Management makes decisions on what they can directly influence--the organizational processes.

In the ABC impact scenario, the model identifies five technical problem areas for management to examine. However, not all of ABC's additional requirements require a modification. For example, office supplies had enough reserve capacity to handle the increased flow for the ABC project.

B. MODIFYING THE MODEL--ONE POSSIBILITY

In order to resolve the broken constraints, certain decisions would have to be made. The first would be a reallocation of supervisors' time. For this scenario, only one supervisor had to reallocate the amount of time for ABC. The rest of the supervisors could absorb the time needed in their excess capacity. Supervision for work measurement studies was viewed as the logical reduction area based on site interviews, since the supervision of work measurement closely ties in with the ABC project. Therefore supervision for work measurement was reduced in favor of ABC Management. Accounting technician labor could absorb the extra work according to the model. Analyst labor could not and it was the most cost effective to add two more analysts (GS-9 Management Analysts) to the staff. Overtime would have to

cover the remaining required manhours. Training requirements could be handled by the original capacity. Supplies also could be handled under the excess capacity available in the original budget. Travel requirements would increase, and the salary expense and equipment purchase expense would also increase. Figure 25 presents the updated model process and demand boxes with the process inputs needed to meet the ABC project demand.

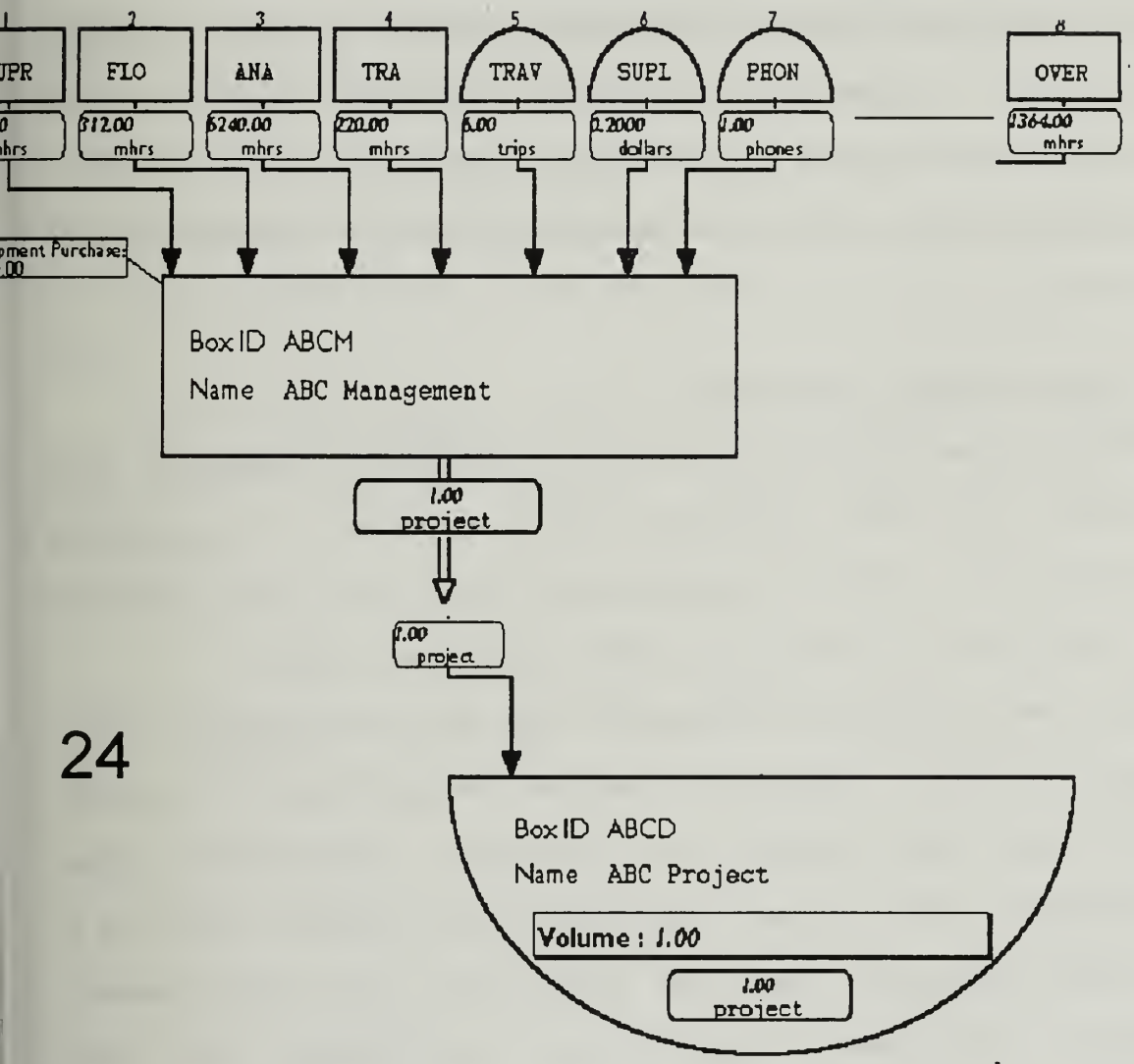
According to the established model, to handle the ABC impact would require a salary budget increase of $159,000, hiring of two new personnel, an additional phone, purchase of new computer equipment ($4000), overtime allowance, and an increase of four travel trips allowed for the department. Table 3 summarizes the needed increases.

TABLE 3: SUMMARY OF EXPENSE INCREASES RESULTING FROM IMPLEMENTING AN ABC SYSTEM

Expense Category	Amount of Increase	Annual Cost
Phones	1 Phone	$264
Travel	4 Trips	$1,440
Salaries	2 New Hires (GS-9) & Overtime	$159,000
	TOTAL	$160,704

DDRW Model

ABC Requirements



24

Figure 25

Appendix B provides a complete cost breakdown of the ABC impact scenario. Pages 148-150 give a summary of the modified flow utilization and the total cost of each of the boxes. A Scenario Changes report is page 151 and it summarizes the changes made to the model to support the ABC requirements. An expense breakdown for the ABC modified model is given on pages 152 and 153. Flow utilization of available resources are given in the Detailed Flow Results report on pages B7-B14. Pages 154-211 give individual unit/revenue/cost breakdowns per model box.

C. OTHER POSSIBLE SOLUTIONS

Though the model provides an excellent framework for management to make decisions with regards to the ABC implementation, other alternatives could be tried and the model could aid in analyzing these solutions also.

One idea would be to streamline the work measurement study process to fully integrate the ABC validation and review process for time studies on personnel along with other requirements. The current DLA Unit Cost program, which is a stand-alone program, could be folded into the ABC process. Instead of continued tabulation of the standard unit cost program, a modified program based on ABC Management could create a new and more "activity-specific" unit cost. Traditional accounting allocations could be phased out in favor of ABC cost tracing practices. Cost code processing by

supervisors which has been the information source for direct labor information for years could be streamlined into an ABC input process.

Lastly data collection needs to be coordinated and reported back to the managers in a helpful and informative manner. The information gathered under ABC will serve no real value unless it is presented to the managers running the activities or the directors in charge of the operations. A model approach as discussed here may be a great alternative to DLA's planned approach of distributing numeric spreadsheet data.

In the next chapter, drawing on the information presented here and in earlier chapters, some conclusions will be discussed.

VI. CONCLUSION

In this chapter, some final comments, conclusions and recommendations are presented. Ideas for further research are also suggested.

A. ABC MANAGEMENT

Once a ABC data collection system is in place and the data can be formulated to present an accurate and understandable picture of the activities, management can appreciate a new perspective on process and cost. Before ABC, cost visibility was limited to *allocated* department expenses, direct labor and direct material. With ABC, cost visibility includes not only major cost items but also outcome and volume measures, measures of key cost drivers, monetary value added, costs per unit of outcome and costs associated with individual activities or product lines.

ABC can provide management the cost information necessary to compute the optimal output levels in both rate and volume. ABC gives managers the cost information needed in terms the management can both see and control--the activities of the business. As Professor James Brimson stated in his book, *Activity Accounting: An Activity Based Costing Approach*:

> Activity Analysis is the set of techniques used to identify the significant activities of an enterprise and

> analyze their cost and performance in detail. Activities are the heart of a cost management system. Analyzing a firm in terms of activities ensures that plans are transmitted to a level at which action can be taken, facilitates goal congruence, highlights cost drivers, supports continuous improvement, and enhances decision support systems.[14]

For DLA, it seems the time has come for ABC Management. The need to trace costs and understand cost efficiency and cost effectiveness has never been greater in the DoD. Any management tool that aids managers in understanding and controlling their costs will be a great benefit.

B. ABC CONCERNS

There can be some dangers with an ABC program. Management needs to be fully aware of these pitfalls and prevent their occurrence.

One concern is the proper definition of activities. If there are several similar activities, are they all defined in a similar manner? For example, when a partially assembled product arrives at a work station, is the act of moving the item into the building part of the receiving activity or part of the transportation activity? This is not a problem if the activity breakdown is consistent throughout the business, but if activities become convoluted in the business, then precise cost measurements will not be worthwhile.

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[14]James A. Brimson, Activity Accounting: An Activity Based Costing Approach (New York: John Wiley & Sons, Inc., 1991), 77.

Another area of concern is whether focusing too much on a single activity's cost could hurt an entire system. In other words, what may be very cost effective for one activity may cause significant hardships for another activity. For example, it might be more efficient for an activity not to bother stacking items before transfer to the next activity. Yet the non-stacked items may cause major slowdowns further down the line because they must be stacked before loading. The stacking, though, inefficient for one activity might be the most efficient way for the system overall.

A third area of concern is ensuring that activities have ownership in the management structure. In other words, if an activity is taking place, it must be under a supervisor's responsibility. If no one views an activity as one of their concerns, then cost and quality of its outputs will not be controlled and cost and output measurement will be nothing but a source of frustration.

Lastly, ABC can become a difficult tool to utilize for certain products that traditionally always been hard to quantify. Examples include: research and development, and a business' public relations/public service strategies.

C. DLA AND THE ABC PROGRAM

During the course of this thesis research, the author saw first hand the beginning of the ABC implementation at the DDRW. In the beginning, there was a strong effort to contain

the number of outputs a DLA site would produce. However this was quickly recognized as not workable. For instance, the various unique requirements needed for storage and shipment of different DLA stock items made a general output category useless. A box of nails cannot be put in the same category as a 57,000 pound ship's reduction gear for storage and shipment. As a result the number of different outputs from the Distribution department alone was well over two hundred. At the same time the individual sites were defining their outputs, DLA was also pushing to standardize the outputs among sites nationwide. As the ABC project continued to grew, so too did the concern for how to manage the data. This thesis presents the reasonable answer to that question in Chapter V. It is projected that with modest increases in salaries and other funding that Planning and Resource Management department can handle the ABC system implementation and sustain its use.

If DLA can avoid the pitfalls of using ABC information and strongly implement an ABCM program, results could be dramatic. Proper definition of its outputs could provide great management information on how much various functions actually cost DLA. One obstacle that seems to be slowing ABC implementation down at DLA is the plan to gather, sort and present the ABC collection data. Currently, DLA is attempting to develop a complicated software spreadsheet that will handle the ABC data. As of this writing, the spreadsheet results have been poor. A better solution might be for DLA to

consider the possibility of purchasing a commerically available ABC software package and modify it for its use rather than trying to invent one from scratch.

D. DLA AND THE MODEL APPROACH

If DLA would consider taking the ABCM program one step further and use a model analysis concept, even greater efficiencies could be possible.

Using *The Model Approach*™ and its graphic interface for the department analysis seemed to add an extra degree of understanding that went beyond "numbers only". The visual graphics enables managers to see the inputs, outputs, and the process flows. The enforced constraints and flow levels allowed for a true understanding of the interrelationships of activities. The model's interconnections between activities kept the entire operation in balance.

At the DDRW site, great interest was shown in the graphical representations of the Planning and Resource Management department that were created for this thesis. It provided a level of understanding about activity analysis that is difficult or impossible to attain in the spreadsheet only print-outs. Activities are presented in the terms that the supervisors readily understood. Some supervisors noticed, for the first time that activities under their supervision were incurring costs that they were not aware of. The model

provided these supervisors better understanding, and hopefully, this will result in better management.

For DLA and DDRW's Planning and Resource Management department in particular, *The Model Approach*™ seems to be solid way for them to reach the ABC Management goals. As demonstrated in analyzing the department, it is a dynamic tool, giving management a necessary grasp on activities and the costs that fuel them.

E. RECOMMENDATIONS

DLA should continue the plan to implement an ABCM program. Though costs would initially increase for the Planning & Resource Management department, strong integration with both the work measurement program and the DoD Unit Cost system could result in long term efficiencies and additional cost savings. The ABCM program instituted Agency-wide should be an excellent way to identify cost drivers and optimize operations.

F. AREAS OF FURTHER STUDY

Further studies into the actual implementation of DLA's ABC program may provide valuable lessons for other government agencies. A follow up on the DDRW ABC program should be conducted in 1995. Questions of interest include: How was the final program put together? How effective was it in ABCM?

How accurate was the Planning & Resource Management model?

Does ABC really work at DDRW?

APPENDIX A: PLANNING AND RESOURCE MANAGEMENT DEPARTMENT MASTER MODEL

This appendix contains the data from the DDRW Planning and Resource Management master model developed with the *Net Prophet II*™ software.

Scenario Master Model
Period #1 Annual

Jun 05 1994

Scenario Results
Flow-Unit Cost

List of Supply Boxes Where :

Total Boxes in Model 37
Âvailable 5

ID	Box Name	Flow	Units	Unit Total Cost
PHON	Telephones	91.00	phones	264:0000
SAL$	Personnel Salaries	3727447.00	dollars	1.0000
SUPL	Supplies	78025.80	dollars	1.0000
TRAV	Travel	888.00	trips	360.0000
UTIL	Utilities & Maintenance	13730.00	sqft	3.4800

Scenario Master Model
Period #1 Annual

Jun 05 1994

Scenario Results
Flow-Unit Cost

List of Process Boxes Where :

Total Boxes in Model 37
Available 20

D	Box Name	Flow	Units	Unit Total Cost
BCM	ABC Management	0.00	project	0.0000
NA	Analysts Labor	101640.00	mhrs	27.9089
IR	Director (Comptroller)	2080.00	mhrs	43.7438
IV	Division Chiefs	4160.00	mhrs	49.2516
LO	Accounting Labor	21760.00	mhrs	17.9440
VER	Overtime Costs	0.00	mhrs	0.0000
BA1	Management Information Systems	1.00	project	499707.0938
BA2	Unit Cost Program	16.00	summaries	24737.7324
BB1	Depot Budget Accounts	10.00	accts	46119.2781
BB2	Region Accounts & ISA's	14.00	accts	22303.9464
F1	Accounting Inputs for DFAS	20000.00	acct input	12.1221
F2	Accounting Reconciliations	8950.00	acct recon	17.2908
F3	Customer Service	3800.00	customers	30.8919
DA1	Functional Reviews	36.00	reviews	12999.2439
DA2	Special Studies	30.00	studies	18638.2750
DM1	Work Measurement Studies	63.00	studies	9829.2351
DM2	Master Account Records	240.00	accts	1862.7108
CT	Secretarial Services	6240.00	mhrs	27.0472
PR	Supervision	10320.00	mhrs	55.5557
RA	Training	9900.00	mhrs	15.5483

Scenario Master Model
Period #1 Annual

Jun 05 1994

Scenario Results
Flow-Unit Cost

List of Demand Boxes Where :

Total Boxes in Model 37
Available 12

ID	Box Name	Flow	Units	Unit Total Cost
ABCD	ABC Project	0.00	project	0.0000
ARCN	Accoubting Reconciles	8950.00	acct recon	17.2908
CUST	Customers	3800.00	customers	30.8919
DACT	Depot Accounts	10.00	accts	46119.2781
INPT	Accounting Inputs	20000.00	acct input	12.1221
MAR	Master Account Records	240.00	accts	1862.7108
MISD	Mgmt Info System Project	1.00	project	499707.0938
RACT	Region Accounts	14.00	accts	22303.9464
REVW	Functional Reviews	36.00	reviews	12999.2439
STU2	Work Measurement Study Demand	63.00	studies	9829.2351
STUD	Special Studies Demand	30.00	studies	18638.2750
UNCD	Unit Cost Program Summaries	16.00	summaries	24737.7324

MODEL TITLE : Planning & Resource Management Model
SCENARIO: Master Model PERIOD # : 1 Annual

==========

GORY: 110 Salary Expense

PE	$DATA	QUANTITY	UNITS	TOTAL$	UNIT$	%TOTAL
pply	1.00V$	3727447.00	dollars	3727447.00	1.00	100.00

GORY: 210 Travel Expense

PE	$DATA	QUANTITY	UNITS	TOTAL$	UNIT$	%TOTAL
pply	360.00V$	888.00	trips	319680.00	360.00	100.00

GORY: 310 Supplies

PE	$DATA	QUANTITY	UNITS	TOTAL$	UNIT$	%TOTAL
pply	1.00V$	78025.80	dollars	78025.80	1.00	100.00

GORY: 410 Equipment Purchases

PE	$DATA	QUANTITY	UNITS	TOTAL$	UNIT$	%TOTAL
ocess	20000.00F$	20000.00	acct input	20000.00	1.00	25.00
ocess	15000.00F$	8950.00	acct recon	15000.00	1.68	18.75
ocess	30000.00F$	1.00	project	30000.00	30000.00	37.50
ocess	15000.00F$	10.00	accts	15000.00	1500.00	18.75
ocess	0.00F$	0.00	project	0.00	0.00	0.00
		80000.00F$		80000.00		

GORY: 510 Telephone Expense

PE	$DATA	QUANTITY	UNITS	TOTAL$	UNIT$	%TOTAL
pply	264.00V$	91.00	phones	24024.00	264.00	100.00

MODEL TITLE : Planning & Resource Management Model
SCENARIO: Master Model PERIOD # : 1 Annual

CATEGORY: 610 Utilities Expense

BOX	TYPE	$DATA	QUANTITY	UNITS	TOTAL$	UNIT$	%TOTAL
UTIL	Supply	3.48V$	13730.00	sqft	47780.40	3.48	100.00

MODEL TITLE : Planning & Resource Management Model
SCENARIO: Master Model PERIOD # : 1 Annual

==========

: PHON TYPE: Supply NAME: Telephones
UTPUT FLOW: 91.00 phones
APACITY: 91.00 phones UTILIZATION: 100.00 %

: SAL$ TYPE: Supply NAME: Personnel Salaries
UTPUT FLOW: 3727447.00 dollars
APACITY: 3778400.00 dollars UTILIZATION: 98.65 %

: SUPL TYPE: Supply NAME: Supplies
UTPUT FLOW: 78025.80 dollars
APACITY: 80000.00 dollars UTILIZATION: 97.53 %

: TRAV TYPE: Supply NAME: Travel
UTPUT FLOW: 888.00 trips
APACITY: 890.00 trips UTILIZATION: 99.78 %

: UTIL TYPE: Supply NAME: Utilities & Maintenance
UTPUT FLOW: 13730.00 sqft
APACITY: 13800.00 sqft UTILIZATION: 99.49 %

MODEL TITLE : Planning & Resource Management Model
SCENARIO: Master Model PERIOD # : 1 Annual

BOX ID : ABCM TYPE: Process NAME: ABC Management
OUTPUT FLOW: 0.00 project
ENTRY_LINK BOXES INPUT FLOW

SUPR	Process	Supervision	0.00 mhrs
FLO	Process	Accounting Labor	0.00 mhrs
ANA	Process	Analysts Labor	0.00 mhrs
TRA	Process	Training	0.00 mhrs
TRAV	Supply	Travel	0.00 trips
SUPL	Supply	Supplies	0.00 dollars
PHON	Supply	Telephones	0.00 phones
OVER	Process	Overtime Costs	0.00 mhrs

BOX ID : ANA TYPE: Process NAME: Analysts Labor
OUTPUT FLOW: 101640.00 mhrs
CAPACITY: 101920.00 mhrs UTILIZATION: 99.73 %
ENTRY_LINK BOXES INPUT FLOW

UTIL	Supply	Utilities & Maintenance	8730.00 sqft
SAL$	Supply	Personnel Salaries	2806280.50 dollars

BOX ID : DIR TYPE: Process NAME: Director (Comptroller)
OUTPUT FLOW: 2080.00 mhrs
CAPACITY: 2080.00 mhrs UTILIZATION: 100.00 %
ENTRY_LINK BOXES INPUT FLOW

PHON	Supply	Telephones	3.00 phones
UTIL	Supply	Utilities & Maintenance	600.00 sqft
SAL$	Supply	Personnel Salaries	86694.40 dollars
SUPL	Supply	Supplies	332.80 dollars
TRAV	Supply	Travel	3.00 trips

BOX ID : DIV TYPE: Process NAME: Division Chiefs
OUTPUT FLOW: 4160.00 mhrs
CAPACITY: 4160.00 mhrs UTILIZATION: 100.00 %
ENTRY_LINK BOXES INPUT FLOW

PHON	Supply	Telephones	4.00 phones
UTIL	Supply	Utilities & Maintenance	600.00 sqft
SAL$	Supply	Personnel Salaries	159702.39 dollars
SUPL	Supply	Supplies	665.60 dollars
DIR	Process	Director (Comptroller)	880.00 mhrs
TRAV	Supply	Travel	8.00 trips

MODEL TITLE : Planning & Resource Management Model
SCENARIO: Master Model PERIOD # : 1 Annual

: FLO TYPE: Process NAME: Accounting Labor
OUTPUT FLOW: 21760.00 mhrs
CAPACITY: 22880.00 mhrs UTILIZATION: 95.10 %

ENTRY_LINK	BOXES		INPUT FLOW	
UTIL	Supply	Utilities & Maintenance	2400.00	sqft
SAL$	Supply	Personnel Salaries	372748.78	dollars
TRAV	Supply	Travel	26.00	trips

: OVER TYPE: Process NAME: Overtime Costs
OUTPUT FLOW: 0.00 mhrs

ENTRY_LINK	BOXES		INPUT FLOW	
SAL$	Supply	Personnel Salaries	0.00	dollars

: RBA1 TYPE: Process NAME: Management Information Systems
OUTPUT FLOW: 1.00 project

ENTRY_LINK	BOXES		INPUT FLOW	
SUPR	Process	Supervision	1300.00	mhrs
TRA	Process	Training	1200.00	mhrs
PHON	Supply	Telephones	10.00	phones
SUPL	Supply	Supplies	5280.00	dollars
ANA	Process	Analysts Labor	12000.00	mhrs
TRAV	Supply	Travel	100.00	trips

: RBA2 TYPE: Process NAME: Unit Cost Program
OUTPUT FLOW: 16.00 summaries

ENTRY_LINK	BOXES		INPUT FLOW	
SUPR	Process	Supervision	780.00	mhrs
TRA	Process	Training	900.00	mhrs
PHON	Supply	Telephones	8.00	phones
SUPL	Supply	Supplies	3916.00	dollars
ANA	Process	Analysts Labor	10880.00	mhrs
TRAV	Supply	Travel	80.00	trips

: RBB1 TYPE: Process NAME: Depot Budget Accounts
OUTPUT FLOW: 10.00 accts

ENTRY_LINK	BOXES		INPUT FLOW	
SUPR	Process	Supervision	1040.00	mhrs
TRA	Process	Training	1200.00	mhrs
PHON	Supply	Telephones	8.00	phones
SUPL	Supply	Supplies	3000.00	dollars
ANA	Process	Analysts Labor	12240.00	mhrs
TRAV	Supply	Travel	64.00	trips

MODEL TITLE : Planning & Resource Management Model
SCENARIO: Master Model PERIOD # : 1 Annual

BOX ID : RBB2 TYPE: Process NAME: Region Accounts & ISA's
OUTPUT FLOW: 14.00 accts

ENTRY_LINK BOXES			INPUT FLOW
SUPR	Process	Supervision	1040.00 mhrs
TRA	Process	Training	400.00 mhrs
PHON	Supply	Telephones	4.00 phones
SUPL	Supply	Supplies	4200.00 dollars
ANA	Process	Analysts Labor	8320.00 mhrs
TRAV	Supply	Travel	30.00 trips

BOX ID : RF1 TYPE: Process NAME: Accounting Inputs for DFAS
OUTPUT FLOW: 20000.00 acct input

ENTRY_LINK BOXES			INPUT FLOW
SUPR	Process	Supervision	400.00 mhrs
TRA	Process	Training	400.00 mhrs
PHON	Supply	Telephones	6.00 phones
FLO	Process	Accounting Labor	10400.00 mhrs
SUPL	Supply	Supplies	5800.00 dollars

BOX ID : RF2 TYPE: Process NAME: Accounting Reconciliations
OUTPUT FLOW: 8950.00 acct recon

ENTRY_LINK BOXES			INPUT FLOW
SUPR	Process	Supervision	400.00 mhrs
TRA	Process	Training	400.00 mhrs
PHON	Supply	Telephones	5.00 phones
FLO	Process	Accounting Labor	6000.00 mhrs
SUPL	Supply	Supplies	2327.00 dollars

BOX ID : RF3 TYPE: Process NAME: Customer Service
OUTPUT FLOW: 3800.00 customers

ENTRY_LINK BOXES			INPUT FLOW
SUPR	Process	Supervision	400.00 mhrs
TRA	Process	Training	500.00 mhrs
PHON	Supply	Telephones	7.00 phones
FLO	Process	Accounting Labor	4480.00 mhrs
SUPL	Supply	Supplies	836.00 dollars
TRAV	Supply	Travel	12.00 trips

MODEL TITLE : Planning & Resource Management Model
SCENARIO: Master Model PERIOD # : 1 Annual

: ROA1 TYPE: Process NAME: Functional Reviews
)UTPUT FLOW: 36.00 reviews

:NTRY_LINK BOXES			INPUT FLOW
SUPR	Process	Supervision	780.00 mhrs
TRA	Process	Training	1500.00 mhrs
PHON	Supply	Telephones	8.00 phones
SUPL	Supply	Supplies	21600.00 dollars
ANA	Process	Analysts Labor	12240.00 mhrs
TRAV	Supply	Travel	100.00 trips

: ROA2 TYPE: Process NAME: Special Studies
)UTPUT FLOW: 30.00 studies

:NTRY_LINK BOXES			INPUT FLOW
SUPR	Process	Supervision	1300.00 mhrs
TRA	Process	Training	1500.00 mhrs
PHON	Supply	Telephones	7.00 phones
SUPL	Supply	Supplies	22500.00 dollars
ANA	Process	Analysts Labor	14320.00 mhrs
TRAV	Supply	Travel	110.00 trips

: ROM1 TYPE: Process NAME: Work Measurement Studies
UTPUT FLOW: 63.00 studies

NTRY_LINK BOXES			INPUT FLOW
SUPR	Process	Supervision	1400.00 mhrs
TRA	Process	Training	1200.00 mhrs
PHON	Supply	Telephones	10.00 phones
SUPL	Supply	Supplies	1260.00 dollars
ANA	Process	Analysts Labor	16400.00 mhrs
TRAV	Supply	Travel	170.00 trips

: ROM2 TYPE: Process NAME: Master Account Records
UTPUT FLOW: 240.00 accts

NTRY_LINK BOXES			INPUT FLOW
SUPR	Process	Supervision	680.00 mhrs
TRA	Process	Training	700.00 mhrs
PHON	Supply	Telephones	6.00 phones
SUPL	Supply	Supplies	120.00 dollars
ANA	Process	Analysts Labor	12240.00 mhrs
TRAV	Supply	Travel	153.00 trips

M[illegible] TITLE : Planning & Resource Management Model
ENARIO: Master Model PERIOD # : 1 Annual

BOX ID : SECT TYPE: Process NAME: Secretarial Services

OUTPUT FLOW:		6240.00 mhrs		
CAPACITY:		6240.00 mhrs	UTILIZATION:	100.00 %
ENTRY_LINK BOXES				INPUT FLOW
SAL$	Supply	Personnel Salaries	69201.60	dollars
DIR	Process	Director (Comptroller)	700.00	mhrs
DIV	Process	Division Chiefs	1400.00	mhrs

BOX ID : SUPR TYPE: Process NAME: Supervision

OUTPUT FLOW:		10320.00 mhrs		
CAPACITY:		10400.00 mhrs	UTILIZATION:	99.23 %
ENTRY_LINK BOXES				INPUT FLOW
PHON	Supply	Telephones	5.00	phones
UTIL	Supply	Utilities & Maintenance	1200.00	sqft
SAL$	Supply	Personnel Salaries	232819.19	dollars
SUPL	Supply	Supplies	1238.40	dollars
DIR	Process	Director (Comptroller)	500.00	mhrs
DIV	Process	Division Chiefs	2760.00	mhrs
SECT	Process	Secretarial Services	6240.00	mhrs
TRAV	Supply	Travel	20.00	trips

BOX ID : TRA TYPE: Process NAME: Training

OUTPUT FLOW:		9900.00 mhrs		
ENTRY_LINK BOXES				INPUT FLOW
SUPR	Process	Supervision	800.00	mhrs
TRAV	Supply	Travel	12.00	trips
UTIL	Supply	Utilities & Maintenance	200.00	sqft
FLO	Process	Accounting Labor	880.00	mhrs
SUPL	Supply	Supplies	4950.00	dollars
ANA	Process	Analysts Labor	3000.00	mhrs

MODEL TITLE : Planning & Resource Management Model
SCENARIO: Master Model PERIOD # : 1 Annual

: ABCD TYPE: Demand NAME: ABC Project
OLUME: 0.00 project
NTRY_LINK BOXES INPUT FLOW
ABCM Process ABC Management 0.00 project

: ARCN TYPE: Demand NAME: Accoubting Reconciles
OLUME: 8950.00 acct recon
NTRY_LINK BOXES INPUT FLOW
RF2 Process Accounting Reconciliations 8950.00 acct recon

: CUST TYPE: Demand NAME: Customers
OLUME: 3800.00 customers
NTRY_LINK BOXES INPUT FLOW
RF3 Process Customer Service 3800.00 customers

: DACT TYPE: Demand NAME: Depot Accounts
OLUME: 10.00 accts
NTRY_LINK BOXES INPUT FLOW
RBB1 Process Depot Budget Accounts 10.00 accts

: INPT TYPE: Demand NAME: Accounting Inputs
OLUME: 20000.00 acct input
NTRY_LINK BOXES INPUT FLOW
RF1 Process Accounting Inputs for DFAS 20000.00 acct input

: MAR TYPE: Demand NAME: Master Account Records
OLUME: 240.00 accts
NTRY_LINK BOXES INPUT FLOW
ROM2 Process Master Account Records 240.00 accts

: MISD TYPE: Demand NAME: Mgmt Info System Project
OLUME: 1.00 project
NTRY_LINK BOXES INPUT FLOW
RBA1 Process Management Information Systems 1.00 project

MODEL TITLE : Planning & Resource Management Model
SCENARIO: Master Model PERIOD # : 1 Annual

BOX ID : RACT TYPE: Demand NAME: Region Accounts
VOLUME: 14.00 accts
ENTRY_LINK BOXES INPUT FLOW
RBB2 Process Region Accounts & ISA's 14.00 accts

BOX ID : REVW TYPE: Demand NAME: Functional Reviews
VOLUME: 36.00 reviews
ENTRY_LINK BOXES INPUT FLOW
ROA1 Process Functional Reviews 36.00 reviews

BOX ID : STU2 TYPE: Demand NAME: Work Measurement Study Demand
VOLUME: 63.00 studies
ENTRY_LINK BOXES INPUT FLOW
ROM1 Process Work Measurement Studies 63.00 studies

BOX ID : STUD TYPE: Demand NAME: Special Studies Demand
VOLUME: 30.00 studies
ENTRY_LINK BOXES INPUT FLOW
ROA2 Process Special Studies 30.00 studies

BOX ID : UNCD TYPE: Demand NAME: Unit Cost Program Summaries
VOLUME: 16.00 summaries
ENTRY_LINK BOXES INPUT FLOW
RBA2 Process Unit Cost Program 16.00 summaries

MODEL TITLE : Planning & Resource Management Model
SCENARIO: Master Model PERIOD # : 1 Annual

HON Telephones OUTPUT FLOW 91.00 phones

gory Name	QTY	UNITS	FIXED $	VARIABLE $	TOTAL $
phone Expense	91.00	phones		24024.00	24024.00
OTAL COST			0.00	24024.00	24024.00

ARY

---	FIXED	VARIABLE	TOTAL
OTAL COST	0.00	24024.00	24024.00
NIT COST	0.00	264.00	264.00

MODEL TITLE : Planning & Resource Management Model
SCENARIO: Master Model PERIOD # : 1 Annual

BOX ID SAL$ Personnel Salaries OUTPUT FLOW 3727447.00 dollars

#	Category Name	QTY	UNITS	FIXED $	VARIABLE $	TOTAL $
110	Salary Expense	3727447.00	dollars		3727447.00	3727447
	TOTAL COST			0.00	3727447.00	3727447

SUMMARY

-------	FIXED	VARIABLE	TOTAL
TOTAL COST	0.00	3727447.00	3727447.00
UNIT COST	0.00	1.00	1.00

MODEL TITLE : Planning & Resource Management Model
SCENARIO: Master Model PERIOD # : 1 Annual

SUPL Supplies OUTPUT FLOW 78025.80 dollars

egory Name	QTY	UNITS	FIXED $	VARIABLE $	TOTAL $
plies	78025.80	dollars		78025.80	78025.80
TOTAL COST			0.00	78025.80	78025.80

MARY

	FIXED	VARIABLE	TOTAL
TOTAL COST	0.00	78025.80	78025.80
UNIT COST	0.00	1.00	1.00

MODEL TITLE : Planning & Resource Management Model
SCENARIO: Master Model PERIOD # : 1 Annual

BOX ID TRAV Travel OUTPUT FLOW 888.00 trips

#	Category Name	QTY	UNITS	FIXED $	VARIABLE $	TOTAL $
210	Travel Expense	888.00	trips		319680.00	319680
	TOTAL COST			0.00	319680.00	319680

SUMMARY

	FIXED	VARIABLE	TOTAL
TOTAL COST	0.00	319680.00	319680.00
UNIT COST	0.00	360.00	360.00

MODEL TITLE : Planning & Resource Management Model
SCENARIO: Master Model PERIOD # : 1 Annual

UTIL Utilities & Maintenance OUTPUT FLOW 13730.00 sqft

egory Name	QTY	UNITS	FIXED $	VARIABLE $	TOTAL $
lities Expense	13730.00	sqft		47780.40	47780.40
TOTAL COST			0.00	47780.40	47780.40

MARY

----	FIXED	VARIABLE	TOTAL
TOTAL COST	0.00	47780.40	47780.40
UNIT COST	0.00	3.48	3.48

MODEL TITLE : Planning & Resource Management Model
SCENARIO: Master Model PERIOD # : 1 Annual

TOTAL COSTS

#	Category Name	QTY	UNITS	FIXED $	VARIABLE $	TOTAL $
110	Salary Expense	3727447.00	dollars		3727447.00	3727447
210	Travel Expense	888.00	trips		319680.00	319680
310	Supplies	78025.80	dollars		78025.80	78025
410	Equipment Purchases		**Mixed**	80000.00		80000
510	Telephone Expense	91.00	phones		24024.00	24024
610	Utilities Expense	13730.00	sqft		47780.40	47780
	TOTAL COST			80000.00	4196957.20	4276957

SUMMARY

	FIXED	VARIABLE	TOTAL
TOTAL COST	80000.00	4196957.20	4276957.20

MODEL TITLE : Planning & Resource Management Model
SCENARIO: Master Model PERIOD # : 1 Annual

Y ME	BOXID: TYPE: FLOW:	PHON Supply 91.00	SAL$ Supply 3727447.00	SUPL Supply 78025.80	TRAV Supply 888.00	UTIL Supply 13730.00
ary Expense		0.00	3727447.00	0.00	0.00	0.00
vel Expense		0.00	0.00	0.00	319680.00	0.00
plies		0.00	0.00	78025.80	0.00	0.00
ephone Expense		24024.00	0.00	0.00	0.00	0.00
lities Expense		0.00	0.00	0.00	0.00	47780.40
AL COSTS		24024.00	3727447.00	78025.80	319680.00	47780.40
PROFIT		-24024.00	-3727447.0	-78025.80	-319680.00	-47780.40
T REVENUE/COST		-264.00	-1.00	-1.00	-360.00	-3.48

MODEL TITLE : Planning & Resource Management Model
SCENARIO: Master Model PERIOD # : 1 Annual

CATEGORY #	NAME	BOXID: TOTAL
110	Salary Expense	3727447.00
210	Travel Expense	319680.00
310	Supplies	78025.80
410	Equipment Purchases	80000.00
510	Telephone Expense	24024.00
610	Utilities Expense	47780.40
	TOTAL COSTS	4276957.20
	NET PROFIT	-4276957.2

MODEL TITLE : Planning & Resource Management Model
SCENARIO: Master Model PERIOD # : 1 Annual

ABCM ABC Management OUTPUT FLOW 0.00 project

egory	Name	QTY	UNITS	FIXED $	VARIABLE $	TOTAL $
TOTAL	COST			0.00	0.00	0.00

MARY

	FIXED	VARIABLE	TOTAL
TOTAL COST	0.00	0.00	0.00
UNIT COST	0.00	0.00	0.00

MODEL TITLE : Planning & Resource Management Model
SCENARIO: Master Model PERIOD # : 1 Annual

BOX ID ANA Analysts Labor OUTPUT FLOW 101640.00 mhrs

#	Category Name	QTY	UNITS	FIXED $	VARIABLE $	TOTAL $
110	Salary Expense	2806280.44	dollars		2806280.44	2806280
610	Utilities Expense	8730.00	sqft		30380.40	30380
	TOTAL COST			0.00	2836660.84	2836660

SUMMARY

	FIXED	VARIABLE	TOTAL
TOTAL COST	0.00	2836660.84	2836660.84
UNIT COST	0.00	27.91	27.91

MODEL TITLE : Planning & Resource Management Model
SCENARIO: Master Model PERIOD # : 1 Annual

DIR Director (Comptroller) OUTPUT FLOW 2080.00 mhrs

egory Name	QTY	UNITS	FIXED $	VARIABLE $	TOTAL $
ıry Expense	86694.40	dollars		86694.40	86694.40
vel Expense	3.00	trips		1080.00	1080.00
olies	332.80	dollars		332.80	332.80
ephone Expense	3.00	phones		792.00	792.00
ities Expense	600.00	sqft		2088.00	2088.00
TOTAL COST			0.00	90987.20	90987.20

MARY

----	FIXED	VARIABLE	TOTAL
TOTAL COST	0.00	90987.20	90987.20
UNIT COST	0.00	43.74	43.74

MODEL TITLE : Planning & Resource Management Model
SCENARIO: Master Model PERIOD # : 1 Annual

BOX ID DIV Division Chiefs OUTPUT FLOW 4160.00 [illegible]

#	Category Name	QTY	UNITS	FIXED $	VARIABLE $	TOTAL $
110	Salary Expense	196380.80	dollars		196380.80	196380
210	Travel Expense	9.27	trips		3336.92	3336
310	Supplies	806.40	dollars		806.40	806
510	Telephone Expense	5.27	phones		1391.08	1391
610	Utilities Expense	853.85	sqft		2971.38	2971
	TOTAL COST			0.00	204886.58	204886

SUMMARY

-------	FIXED	VARIABLE	TOTAL
TOTAL COST	0.00	204886.58	204886.58
UNIT COST	0.00	49.25	49.25

MODEL TITLE : Planning & Resource Management Model
SCENARIO: Master Model PERIOD # : 1 Annual

FLO Accounting Labor OUTPUT FLOW 21760.00 mhrs

egory Name	QTY	UNITS	FIXED $	VARIABLE $	TOTAL $
ary Expense	372748.79	dollars		372748.79	372748.79
vel Expense	26.00	trips		9360.00	9360.00
lities Expense	2400.00	sqft		8352.00	8352.00
TOTAL COST			0.00	390460.79	390460.79

MARY

----	FIXED	VARIABLE	TOTAL
TOTAL COST	0.00	390460.79	390460.79
UNIT COST	0.00	17.94	17.94

MODEL TITLE : Planning & Resource Management Model
SCENARIO: Master Model PERIOD # : 1 Annual

BOX ID OVER Overtime Costs OUTPUT FLOW 0.00 mhrs

#	Category Name	QTY	UNITS	FIXED $	VARIABLE $	TOTAL
	TOTAL COST			0.00	0.00	

SUMMARY

	FIXED	VARIABLE	TOTAL
TOTAL COST	0.00	0.00	0.00
UNIT COST	0.00	0.00	0.00

MODEL TITLE : Planning & Resource Management Model
SCENARIO: Master Model PERIOD # : 1 Annual

BA1 Management Information Systems OUTPUT FLOW 1.00 project

gory Name	QTY	UNITS	FIXED $	VARIABLE $	TOTAL $
ry Expense	417423.89	dollars		417423.89	417423.89
el Expense	105.78	trips		38080.20	38080.20
lies	6182.79	dollars		6182.79	6182.79
pment Purchases	1.00	project	30000.00		30000.00
phone Expense	11.62	phones		3068.84	3068.84
ities Expense	1422.81	sqft		4951.39	4951.39
OTAL COST			30000.00	469707.10	499707.10

ARY

---	FIXED	VARIABLE	TOTAL
OTAL COST	30000.00	469707.10	499707.10
NIT COST	30000.00	469707.10	499707.10

MODEL TITLE : Planning & Resource Management Model
SCENARIO: Master Model PERIOD # : 1 Annual

BOX ID RBA2 Unit Cost Program OUTPUT FLOW 16.00 summaries

#	Category Name	QTY	UNITS	FIXED $	VARIABLE $	TOTAL $
110	Salary Expense	354612.21	dollars		354612.21	354612
210	Travel Expense	83.75	trips		30149.28	30149
310	Supplies	4550.82	dollars		4550.82	4550
510	Telephone Expense	8.99	phones		2373.77	2373
610	Utilities Expense	1183.24	sqft		4117.67	4117
	TOTAL COST			0.00	395803.74	395803

SUMMARY

	FIXED	VARIABLE	TOTAL
TOTAL COST	0.00	395803.74	395803.74
UNIT COST	0.00	24737.73	24737.73

MODEL TITLE : Planning & Resource Management Model
SCENARIO: Master Model PERIOD # : 1 Annual

RBB1 Depot Budget Accounts OUTPUT FLOW 10.00 accts

egory Name	QTY	UNITS	FIXED $	VARIABLE $	TOTAL $
ary Expense	410233.56	dollars		410233.56	410233.56
vel Expense	69.00	trips		24839.03	24839.03
plies	3846.43	dollars		3846.43	3846.43
ipment Purchases	10.00	accts	15000.00		15000.00
ephone Expense	9.32	phones		2461.02	2461.02
lities Expense	1382.96	sqft		4812.71	4812.71
TOTAL COST			15000.00	446192.76	461192.76

MARY

	FIXED	VARIABLE	TOTAL
TOTAL COST	15000.00	446192.76	461192.76
UNIT COST	1500.00	44619.28	46119.28

MODEL TITLE : Planning & Resource Management Model
SCENARIO: Master Model PERIOD # : 1 Annual

BOX ID RBB2 Region Accounts & ISA's OUTPUT FLOW 14.00 accts

#	Category Name	QTY	UNITS	FIXED $	VARIABLE $	TOTAL $
110	Salary Expense	290655.53	dollars		290655.53	290655
210	Travel Expense	33.75	trips		12149.44	12149
310	Supplies	4632.42	dollars		4632.42	4632
510	Telephone Expense	5.25	phones		1385.18	1385
610	Utilities Expense	986.41	sqft		3432.70	3432
	TOTAL COST			0.00	312255.27	312255

SUMMARY

-------	FIXED	VARIABLE	TOTAL
TOTAL COST	0.00	312255.27	312255.27
UNIT COST	0.00	22303.95	22303.95

MODEL TITLE : Planning & Resource Management Model
SCENARIO: Master Model PERIOD # : 1 Annual

F1 Accounting Inputs for DFAS OUTPUT FLOW 20000.00 acct input

gory Name	QTY	UNITS	FIXED $	VARIABLE $	TOTAL $
ry Expense	205081.93	dollars		205081.93	205081.93
el Expense	14.25	trips		5130.88	5130.88
lies	6093.70	dollars		6093.70	6093.70
pment Purchases	20000.00	acct input	20000.00		20000.00
phone Expense	6.50	phones		1716.71	1716.71
ities Expense	1270.01	sqft		4419.64	4419.64
TAL COST			20000.00	222442.87	242442.87

ARY

---	FIXED	VARIABLE	TOTAL
TAL COST	20000.00	222442.87	242442.87
IIT COST	1.00	11.12	12.12

MODEL TITLE : Planning & Resource Management Model
SCENARIO: Master Model PERIOD # : 1 Annual

BOX ID RF2 Accounting Reconciliations OUTPUT FLOW 8950.00 acct recon

#	Category Name	QTY	UNITS	FIXED $	VARIABLE $	TOTAL $
110	Salary Expense	129709.92	dollars		129709.92	129709
210	Travel Expense	9.00	trips		3238.23	3238
310	Supplies	2620.70	dollars		2620.70	2620
410	Equipment Purchases	8950.00	acct recon	15000.00		15000
510	Telephone Expense	5.50	phones		1452.71	1452
610	Utilities Expense	784.72	sqft		2730.82	2730
	TOTAL COST			15000.00	139752.39	154752

SUMMARY

	FIXED	VARIABLE	TOTAL
TOTAL COST	15000.00	139752.39	154752.39
UNIT COST	1.68	15.61	17.29

MODEL TITLE : Planning & Resource Management Model
SCENARIO: Master Model PERIOD # : 1 Annual

F3 Customer Service OUTPUT FLOW 3800.00 customers

gory Name	QTY	UNITS	FIXED $	VARIABLE $	TOTAL $
ry Expense	105090.69	dollars		105090.69	105090.69
el Expense	19.34	trips		6960.61	6960.61
lies	1181.46	dollars		1181.46	1181.46
phone Expense	7.51	phones		1983.19	1983.19
ities Expense	624.55	sqft		2173.45	2173.45
OTAL COST			0.00	117389.40	117389.40

ARY

---	FIXED	VARIABLE	TOTAL
OTAL COST	0.00	117389.40	117389.40
NIT COST	0.00	30.89	30.89

MODEL TITLE : Planning & Resource Management Model
SCENARIO: Master Model PERIOD # : 1 Annual

BOX ID ROA1 Functional Reviews OUTPUT FLOW 36.00 reviews

#	Category Name	QTY	UNITS	FIXED $	VARIABLE $	TOTAL
110	Salary Expense	400671.93	dollars		400671.93	40067
210	Travel Expense	104.68	trips		37686.47	3768
310	Supplies	225[illegible].33	dollars		22545.33	2254
510	Telephone Expense	.05	phones		2388.65	238
610	Utilities Expense	1344.95	sqft		4680.41	468
	TOTAL COST			0.00	467972.78	46797

SUMMARY

	FIXED	VARIABLE	TOTAL
TOTAL COST	0.00	467972.78	467972.78
UNIT COST	0.00	12999.24	12999.24

MODEL TITLE : Planning & Resource Management Model
SCENARIO: Master Model PERIOD # : 1 Annual

ROA2 Special Studies OUTPUT FLOW 30.00 studies

gory Name	QTY	UNITS	FIXED $	VARIABLE $	TOTAL $
ıry Expense	485734.17	dollars		485734.17	485734.17
el Expense	116.25	trips		41848.79	41848.79
lies	23558.04	dollars		23558.04	23558.04
phone Expense	8.65	phones		2284.28	2284.28
ities Expense	1644.53	sqft		5722.96	5722.96
OTAL COST			0.00	559148.24	559148.24

ARY

---	FIXED	VARIABLE	TOTAL
OTAL COST	0.00	559148.24	559148.24
NIT COST	0.00	18638.27	18638.27

MODEL TITLE : Planning & Resource Management Model
SCENARIO: Master Model PERIOD : 1 Annual

BOX ID ROM1 Work Measurement Studies OUTPUT FLOW 63.00 studies

#	Category Name	QTY	UNITS	FIXED $	VARIABLE $	TOTAL
110	Salary Expense	544222.08	dollars		544222.08	54422.
210	Travel Expense	176.08	trips		63388.33	6338
310	Supplies	2184.46	dollars		2184.46	218
510	Telephone Expense	11.74	phones		3099.53	309
610	Utilities Expense	1823.99	sqft		6347.49	634
	TOTAL COST			0.00	619241.90	61924

SUMMARY

	FIXED	VARIABLE	TOTAL
TOTAL COST	0.00	619241.90	619241.90
UNIT COST	0.00	9829.24	9829.24

MODEL TITLE : Planning & Resource Management Model
SCENARIO: Master Model PERIOD # : 1 Annual

OM2 Master Account Records OUTPUT FLOW 240.00 accts

gory Name	QTY	UNITS	FIXED $	VARIABLE $	TOTAL $
ry Expense	384010.94	dollars		384010.94	384010.94
el Expense	156.14	trips		56208.75	56208.75
lies	629.65	dollars		629.65	629.65
phone Expense	6.86	phones		1810.11	1810.11
ities Expense	1261.83	sqft		4391.16	4391.16
OTAL COST			0.00	447050.60	447050.60

ARY

---	FIXED	VARIABLE	TOTAL
OTAL COST	0.00	447050.60	447050.60
NIT COST	0.00	1862.71	1862.71

MODEL TITLE : Planning & Res e Management Model
SCENARIO: Master Model D # : 1 Annual

BOX IL SECT Secretarial Services OUTPUT FLOW 6240.00 mhrs

#	Category Name	QTY	UNITS	FIXED $	VARIABLE $	TOTAL $
110	Salary Expense	164467.29	dollars		164467.29	164467
210	Travel Expense	4.13	trips		1486.46	1486
310	Supplies	383.38	dollars		383.38	383
510	Telephone Expense	2.78	phones		734.69	734
610	Utilities Expense	489.28	sqft		1702.68	1702
	TOTAL COST			0.00	168774.50	168774

SUMMARY

-------	FIXED	VARIABLE	TOTAL
TOTAL COST	0.00	168774.50	168774.50
UNIT COST	0.00	27.05	27.05

MODEL TITLE : Planning & Resource Management Model
SCENARIO: Master Model PERIOD # : 1 Annual

UPR Supervision OUTPUT FLOW 10320.00 mhrs

gory Name	QTY	UNITS	FIXED $	VARIABLE $	TOTAL $
ty Expense	548417.60	dollars		548417.60	548417.60
el Expense	31.00	trips		11160.00	11160.00
lies	2236.80	dollars		2236.80	2236.80
phone Expense	12.00	phones		3168.00	3168.00
ties Expense	2400.00	sqft		8352.00	8352.00
TAL COST			0.00	573334.40	573334.40

ARY

---	FIXED	VARIABLE	TOTAL
TAL COST	0.00	573334.40	573334.40
IT COST	0.00	55.56	55.56

MODEL TITLE : Planning & Resource Management Model
SCENARIO: Master Model PERIOD # : 1 Annual

BOX ID TRA Training OUTPUT FLOW 9900.00 mhrs

#	Category Name	QTY	UNITS	FIXED $	VARIABLE $	TOTAL
110	Salary Expense	140417.40	dollars		140417.40	14041
210	Travel Expense	15.45	trips		5563.65	556
310	Supplies	5123.40	dollars		5123.40	512
510	Telephone Expense	0.93	phones		245.58	24
610	Utilities Expense	740.78	sqft		2577.91	257
	TOTAL COST			0.00	153927.94	15392

SUMMARY

	FIXED	VARIABLE	TOTAL
TOTAL COST	0.00	153927.94	153927.94
UNIT COST	0.00	15.55	15.55

MODEL TITLE : Planning & Resource Management Model
SCENARIO: Master Model PERIOD # : 1 Annual

TOTAL COSTS

gory Name	QTY	UNITS	FIXED $	VARIABLE $	TOTAL $
ry Expense	3727447.00	dollars		3727447.00	3727447.00
el Expense	888.00	trips		319680.00	319680.00
lies	78025.80	dollars		78025.80	78025.80
pment Purchases		**Mixed**	80000.00		80000.00
phone Expense	91.00	phones		24024.00	24024.00
ities Expense	13730.00	sqft		47780.40	47780.40
OTAL COST			80000.00	4196957.20	4276957.20

ARY

---	FIXED	VARIABLE	TOTAL
OTAL COST	80000.00	4196957.20	4276957.20

MODEL TITLE : Planning & Resource Management Model
SCENARIO: Master Model PERIOD # : 1 Annual

CATEGORY #	NAME	BOXID: TYPE: FLOW:	ABCM Process 0.00	ANA Process 101640.00	DIR Process 2080.00	DIV Process 4160.00	F Proc 21760
110	Salary Expense		0.00	2806280.44	86694.40	196380.80	372748
210	Travel Expense		0.00	0.00	1080.00	3336.92	9360
310	Supplies		0.00	0.00	332.80	806.40	0
510	Telephone Expense		0.00	0.00	792.00	1391.08	0
610	Utilities Expense		0.00	30380.40	2088.00	2971.38	8352
	TOTAL COSTS		0.00	2836660.84	90987.20	204886.58	390460
	NET PROFIT		0.00	-2836660.8	-90987.20	-204886.58	-390460
	UNIT REVENUE/COST			-27.91	-43.74	-49.25	-17

SUMMARY BOX REVENUE/COST REPORT

MODEL TITLE : Planning & Resource Management Model
SCENARIO: Master Model PERIOD # : 1 Annual

Y IE	BOXID: TYPE: FLOW:	OVER Process 0.00	RBA1 Process 1.00	RBA2 Process 16.00	RBB1 Process 10.00	RBB2 Process 14.00
ry Expense		0.00	417423.89	354612.21	410233.56	290655.53
el Expense		0.00	38080.20	30149.28	24839.03	12149.44
lies		0.00	6182.79	4550.82	3846.43	4632.42
pment Purchases		0.00	30000.00	0.00	15000.00	0.00
phone Expense		0.00	3068.84	2373.77	2461.02	1385.18
ities Expense		0.00	4951.39	4117.67	4812.71	3432.70
L COSTS		0.00	499707.10	395803.74	461192.76	312255.27
PROFIT		0.00	-499707.10	-395803.74	-461192.76	-312255.27
REVENUE/COST			-499707.10	-24737.73	-46119.28	-22303.95

MODEL TITLE : Planning & Resource Management Model
SCENARIO: Master Model PERIOD # : 1 Annual

CATEGORY #	NAME	BOXID: TYPE: FLOW:	RF1 Process 20000.00	RF2 Process 8950.00	RF3 Process 3800.00	ROA1 Process 36.00	RC Proce 30.
110	Salary Expense		205081.93	12.709.92	105090.69	400671.93	485734.
210	Travel Expense		5130.88	3238.23	6960.61	37686.47	41848.
310	Supplies		6093.70	2620.70	1181.46	22545.33	23558.
410	Equipment Purchases		20000.00	15000.00	0.00	0.00	0.
510	Telephone Expense		1716.71	1452.71	1983.19	2388.65	2284.
610	Utilities Expense		4419.64	2730.82	2173.45	4680.41	5722.
	TOTAL COSTS		242442.87	154752.39	117389.40	467972.78	559148.
	NET PROFIT		-242442.87	-154752.39	-117389.40	-467972.78	-559148.
	UNIT REVENUE/COST		-12.12	-17.29	-30.89	-12999.24	-18638.

SUMMARY BOX REVENUE/COST REPORT

MODEL TITLE : Planning & Resource Management Model
SCENARIO: Master Model PERIOD # : 1 Annual

	BOXID:	ROM1	ROM2	SECT	SUPR	TRA
E	TYPE:	Process	Process	Process	Process	Process
	FLOW:	63.00	240.00	6240.00	10320.00	9900.00
ry Expense		544222.08	384010.94	164467.29	548417.60	140417.40
el Expense		63388.33	56208.75	1486.46	11160.00	5563.65
lies		2184.46	629.65	383.38	2236.80	5123.40
phone Expense		3099.53	1810.11	734.69	3168.00	245.58
ities Expense		6347.49	4391.16	1702.68	8352.00	2577.91
L COSTS		619241.90	447050.60	168774.50	573334.40	153927.94
PROFIT		-619241.90	-447050.60	-168774.50	-573334.40	-153927.94
REVENUE/COST		-9829.24	-1862.71	-27.05	-55.56	-15.55

SUMMARY BOX REVENUE/COST REPORT

MODEL TITLE : Planning & Resource Management Model
SCENARIO: Master Model PERIOD # : 1 Annual

CATEGORY #	NAME	BOXID: TOTAL
110	Salary Expense	3727447.00
210	Travel Expense	319680.00
310	Supplies	78025.80
410	Equipment Purchases	80000.00
510	Telephone Expense	24024.00
610	Utilities Expense	47780.40
	TOTAL COSTS	4276957.20
	NET PROFIT	-4276957.2

MODEL TITLE : Planning & Resource Management Model
SCENARIO: Master Model PERIOD # : 1 Annual

ABCD ABC Project OUTPUT FLOW 0.00 project

egory Name	QTY	UNITS	FIXED $	VARIABLE $	TOTAL $
TOTAL COST			0.00	0.00	0.00

MARY

----	FIXED	VARIABLE	TOTAL
TOTAL COST	0.00	0.00	0.00
UNIT COST	0.00	0.00	0.00

MODEL TITLE : Planning & Resource Management Model
SCENARIO: Master Model PERIOD # : 1 Annual

BOX ID ARCN Accounting Reconciles OUTPUT FLOW 8950.00 acct recon

#	Category Name	QTY	UNITS	FIXED $	VARIABLE $	TOTAL $
110	Salary Expense	129709.92	dollars		129709.92	129709
210	Travel Expense	9.00	trips		3238.23	3238
310	Supplies	2620.70	dollars		2620.70	2620
410	Equipment Purchases	8950.00	acct recon	15000.00		15000.
510	Telephone Expense	5.50	phones		1452.71	1452.
610	Utilities Expense	784.72	sqft		2730.82	2730.
	TOTAL COST			15000.00	139752.39	154752.

SUMMARY

	FIXED	VARIABLE	TOTAL
TOTAL COST	15000.00	139752.39	154752.39
UNIT COST	1.68	15.61	17.29

MODEL TITLE : Planning & Resource Management Model
SCENARIO: Master Model PERIOD # : 1 Annual

CUST Customers OUTPUT FLOW 3800.00 customers

egory Name	QTY	UNITS	FIXED $	VARIABLE $	TOTAL $
ary Expense	105090.69	dollars		105090.69	105090.69
vel Expense	19.34	trips		6960.61	6960.61
plies	1181.46	dollars		1181.46	1181.46
ephone Expense	7.51	phones		1983.19	1983.19
lities Expense	624.55	sqft		2173.45	2173.45
TOTAL COST			0.00	117389.40	117389.40

MARY

----	FIXED	VARIABLE	TOTAL
TOTAL COST	0.00	117389.40	117389.40
UNIT COST	0.00	30.89	30.89

MODEL TITLE : Planning & Resource Management Model
SCENARIO: Master Model PERIOD # : 1 Annual

BOX ID DACT Depot Accounts OUTPUT FLOW 10.00 accts

#	Category Name	QTY	UNITS	FIXED $	VARIABLE $	TOTAL $
110	Salary Expense	410233.56	dollars		410233.56	410233
210	Travel Expense	69.00	trips		24839.03	24839
310	Supplies	3846.43	dollars		3846.43	3846
410	Equipment Purchases	10.00	accts	15000.00		15000
510	Telephone Expense	9.32	phones		2461.02	2461
610	Utilities Expense	1382.96	sqft		4812.71	4812
	TOTAL COST			15000.00	446192.76	461192

SUMMARY

-------	FIXED	VARIABLE	TOTAL
TOTAL COST	15000.00	446192.76	461192.76
UNIT COST	1500.00	44619.28	46119.28

MODEL TITLE : Planning & Resource Management Model
SCENARIO: Master Model PERIOD # : 1 Annual

NPT Accounting Inputs OUTPUT FLOW 20000.00 acct input

gory Name	QTY	UNITS	FIXED $	VARIABLE $	TOTAL $
ry Expense	205081.93	dollars		205081.93	205081.93
el Expense	14.25	trips		5130.88	5130.88
lies	6093.70	dollars		6093.70	6093.70
pment Purchases	20000.00	acct input	20000.00		20000.00
phone Expense	6.50	phones		1716.71	1716.71
ities Expense	1270.01	sqft		4419.64	4419.64
OTAL COST			20000.00	222442.87	242442.87

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---	FIXED	VARIABLE	TOTAL
OTAL COST	20000.00	222442.87	242442.87
NIT COST	1.00	11.12	12.12

MODEL TITLE : Planning & Resource Management Model
SCENARIO: Master Model PERIOD # : 1 Annual

BOX ID MAR Master Account Records OUTPUT FLOW 240.00 accts

#	Category Name	QTY	UNITS	FIXED $	VARIABLE $	TOTAL
110	Salary Expense	384010.94	dollars		384010.94	38401
210	Travel Expense	156.14	trips		56208.75	5620
310	Supplies	629.65	dollars		629.65	62
510	Telephone Expense	6.86	phones		1810.11	181
610	Utilities Expense	1261.83	sc		4391.16	439
	TOTAL COST			0.00	447050.60	44705

SUMMARY

	FIXED	VARIABLE	TOTAL
TOTAL COST	0.00	447050.60	447050.60
UNIT COST	0.00	1862.71	1862.71

MODEL TITLE : Planning & Resource Management Model
SCENARIO: Master Model PERIOD # : 1 Annual

MISD Mgmt Info System Project OUTPUT FLOW 1.00 project

egory Name	QTY	UNITS	FIXED $	VARIABLE $	TOTAL $
ary Expense	417423.89	dollars		417423.89	417423.89
vel Expense	105.78	trips		38080.20	38080.20
plies	6182.79	dollars		6182.79	6182.79
ipment Purchases	1.00	project	30000.00		30000.00
ephone Expense	11.62	phones		3068.84	3068.84
ities Expense	1422.81	sqft		4951.39	4951.39
TOTAL COST			30000.00	469707.10	499707.10

MARY

----	FIXED	VARIABLE	TOTAL
TOTAL COST	30000.00	469707.10	499707.10
UNIT COST	30000.00	469707.10	499707.10

MODEL TITLE : Planning & Resource Management Model
SCENARIO: Master Model PERIOD # : 1 Annual

BOX ID RACT Region Accounts OUTPUT FLOW 14.00 accts

#	Category Name	QTY	UNITS	FIXED $	VARIABLE $	TOTAL
110	Salary Expense	290655.53	dollars		290655.53	29065
210	Travel Expense	33.75	trips		12149.44	1214
310	Supplies	4632.42	dollars		4632.42	463
510	Telephone Expense	5.25	phones		1385.18	138
610	Utilities Expense	986.41	sqft		3432.70	343
	TOTAL COST			0.00	312255.27	31225

SUMMARY

	FIXED	VARIABLE	TOTAL
TOTAL COST	0.00	312255.27	312255.27
UNIT COST	0.00	22303.95	22303.95

MODEL TITLE : Planning & Resource Management Model
SCENARIO: Master Model PERIOD # : 1 Annual

REVW Functional Reviews OUTPUT FLOW 36.00 reviews

egory Name	QTY	UNITS	FIXED $	VARIABLE $	TOTAL $
ry Expense	400671.93	dollars		400671.93	400671.93
el Expense	104.68	trips		37686.47	37686.47
lies	22545.33	dollars		22545.33	22545.33
phone Expense	9.05	phones		2388.65	2388.65
ities Expense	1344.95	sqft		4680.41	4680.41
OTAL COST			0.00	467972.78	467972.78

ARY

---	FIXED	VARIABLE	TOTAL
OTAL COST	0.00	467972.78	467972.78
NIT COST	0.00	12999.24	12999.24

MODEL TITLE : Planning & Resource Management Model
SCENARIO: Master Model PERIOD # : 1 Annual

BOX ID STU2 Work Measurement Study Demand OUTPUT FLOW 63.00 studies

#	Category Name	QTY	UNITS	FIXED $	VARIABLE $	TOTAL $
110	Salary Expense	544222.08	dollars		544222.08	544222.
210	Travel Expense	176.08	trips		63388.33	63388.
310	Supplies	2184.46	dollars		2184.46	2184.
510	Telephone Expense	11.74	phones		3099.53	3099.
610	Utilities Expense	1823.99	sqft		6347.49	6347.
	TOTAL COST			0.00	619241.90	619241.

SUMMARY

-------	FIXED	VARIABLE	TOTAL
TOTAL COST	0.00	619241.90	619241.90
UNIT COST	0.00	9829.24	9829.24

MODEL TITLE : Planning & Resource Management Model
SCENARIO: Master Model PERIOD # : 1 Annual

TUD Special Studies Demand OUTPUT FLOW 30.00 studies

gory Name	QTY	UNITS	FIXED $	VARIABLE $	TOTAL $
ry Expense	485734.17	dollars		485734.17	485734.17
el Expense	116.25	trips		41848.79	41848.79
lies	23558.04	dollars		23558.04	23558.04
phone Expense	8.65	phones		2284.28	2284.28
ties Expense	1644.53	sqft		5722.96	5722.96
OTAL COST			0.00	559148.24	559148.24

ARY

---	FIXED	VARIABLE	TOTAL
OTAL COST	0.00	559148.24	559148.24
NIT COST	0.00	18638.27	18638.27

MODEL TITLE : Planning & Resource Management Model
SCENARIO: Master Model PERIOD # : 1 Annual

BOX ID UNCD Unit Cost Program Summaries OUTPUT FLOW 16.00 summaries

#	Category Name	QTY	UNITS	FIXED $	VARIABLE $	TOTAL $
110	Salary Expense	354612.21	dollars		354612.21	354612.
210	Travel Expense	83.75	trips		30149.28	30149.
310	Supplies	4550.82	dollars		4550.82	4550.
510	Telephone Expense	8.99	phones		2373.77	2373.
610	Utilities Expense	1183.24	sqft		4117.67	4117.
	TOTAL COST			0.00	395803.74	395803.

SUMMARY

-------	FIXED	VARIABLE	TOTAL
TOTAL COST	0.00	395803.74	395803.74
UNIT COST	0.00	24737.73	24737.73

MODEL TITLE : Planning & Resource Management Model
SCENARIO: Master Model PERIOD # : 1 Annual

TOTAL COSTS

egory Name	QTY	UNITS	FIXED $	VARIABLE $	TOTAL $
ıry Expense	3727447.00	dollars		3727447.00	3727447.00
el Expense	888.00	trips		319680.00	319680.00
lies	78025.80	dollars		78025.80	78025.80
pment Purchases		**Mixed**	80000.00		80000.00
phone Expense	91.00	phones		24024.00	24024.00
ities Expense	13730.00	sqft		47780.40	47780.40
OTAL COST			80000.00	4196957.20	4276957.20

ARY

---	FIXED	VARIABLE	TOTAL
OTAL COST	80000.00	4196957.20	4276957.20

MODEL TITLE : Planning & Resource Management Model
SCENARIO: Master Model PERIOD # : 1 Annual

CATEGORY #	NAME	BOXID: TYPE: FLOW:	ABCD Demand 0.00	ARCN Demand 8950.00	CUST Demand 3800.00	DACT Demand 10.00	INI Dema 20000.(
110	Salary Expense		0.00	129709.92	105090.69	410233.56	205081.9
210	Travel Expense		0.00	3238.23	6960.61	24839.03	5130.8
310	Supplies		0.00	2620.70	1181.46	3846.43	6 3.
410	Equipment Purchases		0.00	15000.00	0.00	15000.00	20 0.(
510	Telephone Expense		0.00	1452.71	1983.19	2461.02	1716.
610	Utilities Expense		0.00	2730.82	2173.45	4812.71	4419.(
	TOTAL COSTS		0.00	154752.39	117389.40	461192.76	242442.8
	NET PROFIT		0.00	-154752.39	-117389.40	-461192.76	-242442.8
	UNIT REVENUE/COST			-17.29	-30.89	-46119.28	-12.1

MODEL TITLE : Planning & Resource Management Model
SCENARIO: Master Model PERIOD # : 1 Annual

BOXID:	MAR	MISD	RACT	REVW	STU2
TYPE:	Demand	Demand	Demand	Demand	Demand
FLOW:	240.00	1.00	14.00	36.00	63.00
ry Expense	384010.94	417423.89	290655.53	400671.93	544222.08
el Expense	56208.75	38080.20	12149.44	37686.47	63388.33
lies	629.65	6182.79	4632.42	22545.33	2184.46
pment Purchases	0.00	30000.00	0.00	0.00	0.00
phone Expense	1810.11	3068.84	1385.18	2388.65	3099.53
ities Expense	4391.16	4951.39	3432.70	4680.41	6347.49
L COSTS	447050.60	499707.10	312255.27	467972.78	619241.90
PROFIT	-447050.60	-499707.10	-312255.27	-467972.78	-619241.90
REVENUE/COST	-1862.71	-499707.10	-22303.95	-12999.24	-9829.24

MODEL TITLE : Planning & Resource Management Model
SCENARIO: Master Model PERIOD # : 1 Annual

CATEGORY #	NAME	BOXID: TYPE: FLOW:	STUD Demand 30.00	UNCD Demand 16.00	TOTAL
110	Salary Expense		485734.17	354612.21	3727447.00
210	Travel Expense		41848.79	30149.28	319680.00
310	Supplies		23558.04	4550.82	78025.80
410	Equipment Purchases		0.00	0.00	80000.00
510	Telephone Expense		2284.28	2373.77	24024.00
610	Utilities Expense		5722.96	4117.67	47780.40
	TOTAL COSTS		559148.24	395803.74	4276957.20
	NET PROFIT		-559148.24	-395803.74	-4276957.2
	UNIT REVENUE/COST		-18638.27	-24737.73	

APPENDIX B: ABC IMPACT SCENARIO MODEL

This appendix contains the results of introducing the Activity Based Costing workload scenario on the DDRW Planning and Resource Management department master software model.

Scenario ABC Impact # 1 Jun 05 1994
Period #1 Annual

Scenario Results
Flow-Unit Cost

List of Supply Boxes Where :

Total Boxes in Model 37
Available 5

ID	Box Name	Flow	Units	Unit Total Cost
PHON	Telephones	91.00	phones	264.0000
SAL$	Personnel Salaries	3937321.75	dollars	1.0000
SUPL	Supplies	79770.76	dollars	1.0000
TRAV	Travel	894.00	trips	360.0000
UTIL	Utilities & Maintenance	13730.00	sqft	3.4800

ario ABC Impact # 1 Jun 05 1994
od #1 Annual

Scenario Results
Flow-Unit Cost

of Process Boxes Where :

l Boxes in Model 37
lable 20

Box Name	Flow	Units	Unit Total Cost
BC Management	1.00	project	229223.5781
nalysts Labor	107880.00	mhrs	27.8916
irector (Comptroller)	2080.00	mhrs	43.7438
ivision Chiefs	4160.00	mhrs	49.2516
ccounting Labor	22072.00	mhrs	17.9325
vertime Costs	1364.00	mhrs	22.6800
anagement Information Systems	1.00	project	498843.4375
nit Cost Program	16.00	summaries	24697.4570
epot Budget Accounts	10.00	accts	46037.2750
egion Accounts & ISA's	14.00	accts	22270.0871
ccounting Inputs for DFAS	20000.00	acct input	12.1055
ccounting Reconciliations	8950.00	acct recon	17.2593
ustomer Service	3800.00	customers	30.8133
unctional Reviews	36.00	reviews	12974.8941
pecial Studies	30.00	studies	18604.6708
ork Measurement Studies	63.00	studies	9682.1895
aster Account Records	240.00	accts	1860.2941
ecretarial Services	6240.00	mhrs	27.0472
upervision	10378.00	mhrs	55.3719
raining	10120.00	mhrs	15.2005

Scenario ABC Impact # 1 Jun 05 1994
Period #1 Annual

Scenario Results
Flow-Unit Cost

List of Demand Boxes Where :

Total Boxes in Model 37
Available 12

ID	Box Name	Flow	Units	Unit Total Cost
ABCD	ABC Project	1.00	project	229223.5781
ARCN	Accounting Reconciles	8950.00	acct recon	17.2593
CUST	Customers	3800.00	customers	30.8133
DACT	Depot Accounts	10.00	accts	46037.2750
INPT	Accounting Inputs	20000.00	acct input	12.1055
MAR	Master Account Records	240.00	accts	1860.2941
MISD	Mgmt Info System Project	1.00	project	498843.4375
RACT	Region Accounts	14.00	accts	22270.0871
REVW	Functional Reviews	36.00	reviews	12974.8941
STU2	Work Measurement Study Demand	63.00	studies	9682.1895
STUD	Special Studies Demand	30.00	studies	18604.6708
UNCD	Unit Cost Program Summaries	16.00	summaries	24697.4570

MODEL TITLE : Planning & Resource Management Model
SCENARIO: ABC Impact # 1 PERIOD # : 1 Annual

Boxes Changed	Data Changed	
ID/Box Item	Current Scenario	Master Model
box ABCD ABC Project		
:	1.00	0.00
box ABCM ABC Management		
upervision	208.00	0.00
ccounting Labor	312.00	0.00
nalysts Labor	6240.00	0.00
raining	220.00	0.00
ravel	6.00	0.00
upplies	1628.00	0.00
vertime Costs	1364.00	0.00
box ROM1 Work Measurement Studies		
upervision	1250.00	1400.00
box ANA Analysts Labor		
Y :	108160.00	101920.00
box TRAV Travel		
Y :	894.00	890.00
box SAL$ Personnel Salaries		
Y :	3937400.00	3778400.00

ltiplier Changes

MODEL TITLE : Planning & Resource Management Model
SCENARIO: ABC Impact # 1 PERIOD # : 1 Annual

CATEGORY: 110 Salary Expense

BOX	TYPE	$DATA	QUANTITY	UNITS	TOTAL$	UNIT$	%TOTAL
SAL$	Supply	1.00V$	3937321.75	dollars	3937321.75	1.00	100.00

CATEGORY: 210 Travel Expense

BOX	TYPE	$DATA	QUANTITY	UNITS	TOTAL$	UNIT$	%TOTAL
TRAV	Supply	360.00V$	894.00	trips	321840.00	360.00	100.00

CATEGORY: 310 Supplies

BOX	TYPE	$DATA	QUANTITY	UNITS	TOTAL$	UNIT$	%TOTAL
SUPL	Supply	1.00V$	79770.76	dollars	79770.76	1.00	100.00

CATEGORY: 410 Equipment Purchases

BOX	TYPE	$DATA	QUANTITY	UNITS	TOTAL$	UNIT$	%TOTAL
RF1	Process	20000.00F$	20000.00	acct input	20000.00	1.00	25.00
RF2	Process	15000.00F$	8950.00	acct recon	15000.00	1.68	18.75
RBA1	Process	30000.00F$	1.00	project	30000.00	30000.00	37.50
RBB1	Process	15000.00F$	10.00	accts	15000.00	1500.00	18.75
ABCM	Process	0.00F$	1.00	project	0.00	0.00	0.00

			80000.00F$		80000.00		

CATEGORY: 510 Telephone Expense

BOX	TYPE	$DATA	QUANTITY	UNITS	TOTAL$	UNIT$	%TOTAL
PHON	Supply	264.00V$	91.00	phones	24024.00	264.00	100.00

MODEL TITLE : Planning & Resource Management Model
SCENARIO: ABC Impact # 1 PERIOD # : 1 Annual

ORY: 610 Utilities Expense

E	$DATA	QUANTITY UNITS	TOTAL$	UNIT$	%TOTAL
oly	3.48V$	13730.00 sqft	47780.40	3.48	100.00

MODEL TITLE : Planning & Resource Management Model
SCENARIO: ABC Impact # 1 PERIOD # : 1 Annual

BOX ID : PHON TYPE: Supply NAME: Telephones
OUTPUT FLOW: 91.00 phones
CAPACITY: 91.00 phones UTILIZATION: 100.00 %

BOX ID : SAL$ TYPE: Supply NAME: Personnel Salaries
OUTPUT FLOW: 3937321.75 dollars
CAPACITY: 3937400.00 dollars UTILIZATION: 100.00 %

BOX ID : SUPL TYPE: Supply NAME: Supplies
OUTPUT FLOW: 79770.76 dollars
CAPACITY: 80000.00 dollars UTILIZATION: 99.71 %

BOX ID : TRAV TYPE: Supply NAME: Travel
OUTPUT FLOW: 894.00 trips
CAPACITY: 894.00 trips UTILIZATION: 100.00 %

BOX ID : UTIL TYPE: Supply NAME: Utilities & Maintenance
OUTPUT FLOW: 13730.00 sqft
CAPACITY: 13800.00 sqft UTILIZATION: 99.49 %

MODEL TITLE : Planning & Resource Management Model
SCENARIO: ABC Impact # 1 PERIOD # : 1 Annual

ABCM TYPE: Process NAME: ABC Management
TPUT FLOW: 1.00 project

TRY_LINK BOXES			INPUT FLOW
SUPR	Process	Supervision	208.00 mhrs
FLO	Process	Accounting Labor	312.00 mhrs
ANA	Process	Analysts Labor	6240.00 mhrs
TRA	Process	Training	220.00 mhrs
TRAV	Supply	Travel	6.00 trips
SUPL	Supply	Supplies	1628.00 dollars
PHON	Supply	Telephones	0.00 phones
OVER	Process	Overtime Costs	1364.00 mhrs

ANA TYPE: Process NAME: Analysts Labor
TPUT FLOW: 107880.00 mhrs
PACITY: 108160.00 mhrs UTILIZATION: 99.74 %

TRY_LINK BOXES			INPUT FLOW
UTIL	Supply	Utilities & Maintenance	8730.00 sqft
SAL$	Supply	Personnel Salaries	2978566.75 dollars

DIR TYPE: Process NAME: Director (Comptroller)
TPUT FLOW: 2080.00 mhrs
PACITY: 2080.00 mhrs UTILIZATION: 100.00 %

TRY_LINK BOXES			INPUT FLOW
PHON	Supply	Telephones	3.00 phones
UTIL	Supply	Utilities & Maintenance	600.00 sqft
SAL$	Supply	Personnel Salaries	86694.40 dollars
SUPL	Supply	Supplies	332.80 dollars
TRAV	Supply	Travel	3.00 trips

DIV TYPE: Process NAME: Division Chiefs
PUT FLOW: 4160.00 mhrs
ACITY: 4160.00 mhrs UTILIZATION: 100.00 %

RY_LINK BOXES			INPUT FLOW
HON	Supply	Telephones	4.00 phones
TIL	Supply	Utilities & Maintenance	600.00 sqft
AL$	Supply	Personnel Salaries	159702.39 dollars
UPL	Supply	Supplies	665.60 dollars
IR	Process	Director (Comptroller)	880.00 mhrs
RAV	Supply	Travel	8.00 trips

MODEL TITLE : Planning & Resource Management Model
SCENARIO: ABC Impact # 1 PERIOD # : 1 Annual

BOX ID : FLO TYPE: Process NAME: Accounting Labor
OUTPUT FLOW: 22072.00 mhrs
CAPACITY: 22880.00 mhrs UTILIZATION: 96.47 %

ENTRY_LINK BOXES			INPUT FLOW	
UTIL	Supply	Utilities & Maintenance	2400.00	sqft
SAL$	Supply	Personnel Salaries	378093.34	dollars
TRAV	Supply	Travel	26.00	trips

BOX ID : OVER TYPE: Process NAME: Overtime Costs
OUTPUT FLOW: 1364.00 mhrs

ENTRY_LINK BOXES			INPUT FLOW	
SAL$	Supply	Personnel Salaries	30935.52	dollars

BOX ID : RBA1 TYPE: Process NAME: Management Information Systems
OUTPUT FLOW: 1.00 project

ENTRY_LINK BOXES			INPUT FLOW	
SUPR	Process	Supervision	1300.00	mhrs
TRA	Process	Training	1200.00	mhrs
PHON	Supply	Telephones	10.00	phones
SUPL	Supply	Supplies	5280.00	dollars
ANA	Process	Analysts Labor	12000.00	mhrs
TRAV	Supply	Travel	100.00	trips

BOX ID : RBA2 TYPE: Process NAME: Unit Cost Program
OUTPUT FLOW: 16.00 summaries

ENTRY_LINK BOXES			INPUT FLOW	
SUPR	Process	Supervision	780.00	mhrs
TRA	Process	Training	900.00	mhrs
PHON	Supply	Telephones	8.00	phones
SUPL	Supply	Supplies	3916.00	dollars
ANA	Process	Analysts Labor	10880.00	mhrs
TRAV	Supply	Travel	80.00	trips

BOX ID : RBB1 TYPE: Process NAME: Depot Budget Accounts
OUTPUT FLOW: 10.00 accts

ENTRY_LINK BOXES			INPUT FLOW	
SUPR	Process	Supervision	1040.00	mhrs
TRA	Process	Training	1200.00	mhrs
PHON	Supply	Telephones	8.00	phones
SUPL	Supply	Supplies	3000.00	dollars
ANA	Process	Analysts Labor	12240.00	mhrs
TRAV	Supply	Travel	64.00	trips

MODEL TITLE : Planning & Resource Management Model
SCENARIO: ABC Impact # 1 PERIOD # : 1 Annual

RBB2 TYPE: Process NAME: Region Accounts & ISA's
TPUT FLOW: 14.00 accts

TRY_LINK	BOXES		INPUT FLOW
SUPR	Process	Supervision	1040.00 mhrs
TRA	Process	Training	400.00 mhrs
PHON	Supply	Telephones	4.00 phones
SUPL	Supply	Supplies	4200.00 dollars
ANA	Process	Analysts Labor	8320.00 mhrs
TRAV	Supply	Travel	30.00 trips

RF1 TYPE: Process NAME: Accounting Inputs for DFAS
TPUT FLOW: 20000.00 acct input

TRY_LINK	BOXES		INPUT FLOW
SUPR	Process	Supervision	400.00 mhrs
TRA	Process	Training	400.00 mhrs
PHON	Supply	Telephones	6.00 phones
FLO	Process	Accounting Labor	10400.00 mhrs
SUPL	Supply	Supplies	5800.00 dollars

RF2 TYPE: Process NAME: Accounting Reconciliations
PUT FLOW: 8950.00 acct recon

RY_LINK	BOXES		INPUT FLOW
UPR	Process	Supervision	400.00 mhrs
RA	Process	Training	400.00 mhrs
HON	Supply	Telephones	5.00 phones
LO	Process	Accounting Labor	6000.00 mhrs
UPL	Supply	Supplies	2327.00 dollars

RF3 TYPE: Process NAME: Customer Service
PUT FLOW: 3800.00 customers

RY_LINK	BOXES		INPUT FLOW
UPR	Process	Supervision	400.00 mhrs
RA	Process	Training	500.00 mhrs
HON	Supply	Telephones	7.00 phones
LO	Process	Accounting Labor	4480.00 mhrs
UPL	Supply	Supplies	836.00 dollars
RAV	Supply	Travel	12.00 trips

DETAILED FLOWS RESULTS REPORT

MODEL TITLE : Planning & Resource Management Model
SCENARIO: ABC Impact # 1 PERIOD # : 1 Annual

BOX ID : ROA1 TYPE: Process NAME: Functional Reviews
OUTPUT FLOW: 36.00 reviews

ENTRY_LINK BOXES			INPUT FLOW	
SUPR	Process	Supervision	780.00	mhrs
TRA	Process	Training	1500.00	mhrs
PHON	Supply	Telephones	8.00	phones
SUPL	Supply	Supplies	21600.00	dollars
ANA	Process	Analysts Labor	12240.00	mhrs
TRAV	Supply	Travel	100.00	trips

BOX ID : ROA2 TYPE: Process NAME: Special Studies
OUTPUT FLOW: 30.00 studies

ENTRY_LINK BOXES			INPUT FLOW	
SUPR	Process	Supervision	1300.00	mhrs
TRA	Process	Training	1500.00	mhrs
PHON	Supply	Telephones	7.00	phones
SUPL	Supply	Supplies	22500.00	dollars
ANA	Process	Analysts Labor	14320.00	mhrs
TRAV	Supply	Travel	110.00	trips

BOX ID : ROM1 TYPE: Process NAME: Work Measurement Studies
OUTPUT FLOW: 63.00 studies

ENTRY_LINK BOXES			INPUT FLOW	
SUPR	Process	Supervision	1250.00	mhrs
TRA	Process	Training	1200.00	mhrs
PHON	Supply	Telephones	10.00	phones
SUPL	Supply	Supplies	1260.00	dollars
ANA	Process	Analysts Labor	16400.00	mhrs
TRAV	Supply	Travel	170.00	trips

BOX ID : ROM2 TYPE: Process NAME: Master Account Records
OUTPUT FLOW: 240.00 accts

ENTRY_LINK BOXES			INPUT FLOW	
SUPR	Process	Supervision	680.00	mhrs
TRA	Process	Training	700.00	mhrs
PHON	Supply	Telephones	6.00	phones
SUPL	Supply	Supplies	120.00	dollars
ANA	Process	Analysts Labor	12240.00	mhrs
TRAV	Supply	Travel	153.00	trips

MODEL TITLE : Planning & Resource Management Model
SCENARIO: ABC Impact # 1 PERIOD # : 1 Annual

SECT TYPE: Process NAME: Secretarial Services
TPUT FLOW: 6240.00 mhrs
PACITY: 6240.00 mhrs UTILIZATION: 100.00 %

TRY_LINK	BOXES		INPUT FLOW	
SAL$	Supply	Personnel Salaries	69201.60	dollars
DIR	Process	Director (Comptroller)	700.00	mhrs
DIV	Process	Division Chiefs	1400.00	mhrs

SUPR TYPE: Process NAME: Supervision
TPUT FLOW: 10378.00 mhrs
PACITY: 10400.00 mhrs UTILIZATION: 99.79 %

TRY_LINK	BOXES		INPUT FLOW	
PHON	Supply	Telephones	5.00	phones
UTIL	Supply	Utilities & Maintenance	1200.00	sqft
SAL$	Supply	Personnel Salaries	234127.67	dollars
SUPL	Supply	Supplies	1245.36	dollars
DIR	Process	Director (Comptroller)	500.00	mhrs
DIV	Process	Division Chiefs	2760.00	mhrs
SECT	Process	Secretarial Services	6240.00	mhrs
TRAV	Supply	Travel	20.00	trips

TRA TYPE: Process NAME: Training
'PUT FLOW: 10120.00 mhrs

'RY_LINK	BOXES		INPUT FLOW	
SUPR	Process	Supervision	800.00	mhrs
'RAV	Supply	Travel	12.00	trips
TIL	Supply	Utilities & Maintenance	200.00	sqft
'LO	Process	Accounting Labor	880.00	mhrs
UPL	Supply	Supplies	5060.00	dollars
NA	Process	Analysts Labor	3000.00	mhrs

MODEL TITLE : Planning & Resource Management Model
SCENARIO: ABC Impact # 1 PERIOD # : 1 Annual

BOX ID : ABCD TYPE: Demand NAME: ABC Project
VOLUME: 1.00 project
ENTRY_LINK BOXES INPUT FLOW
ABCM Process ABC Management 1.00 project

BOX ID : ARCN TYPE: Demand NAME: Accounting Reconciles
VOLUME: 8950.00 acct recon
ENTRY_LINK BOXES INPUT FLOW
RF2 Process Accounting Reconciliations 8950 acct recon

BOX ID : CUST TYPE: Demand NAME: Customers
VOLUME: 3800.00 customers
ENTRY_LINK BOXES INPUT FLOW
RF3 Process Customer Service 3800.00 customers

BOX ID : DACT TYPE: Demand NAME: Depot Accounts
VOLUME: 10.00 accts
ENTRY_LINK BOXES INPUT FLOW
RBB1 Process Depot Budget Accounts 10.00 accts

BOX ID : INPT TYPE: Demand NAME: Accounting Inputs
VOLUME: 20000.00 acct input
ENTRY_LINK BOXES INPUT FLOW
RF1 Process Accounting Inputs for DFAS 20000.00 acct input

BOX ID : MAR TYPE: Demand NAME: Master Account Records
VOLUME: 240.00 accts
ENTRY_LINK BOXES INPUT FLOW
ROM2 Process Master Account Records 240.00 accts

BOX ID : MISD TYPE: Demand NAME: Mgmt Info System Project
VOLUME: 1.00 project
ENTRY_LINK BOXES INPUT FLOW
RBA1 Process Management Information Systems 1.00 project

MODEL TITLE : Planning & Resource Management Model
SCENARIO: ABC Impact # 1 PERIOD # : 1 Annual

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RACT TYPE: Demand NAME: Region Accounts
LUME: 14.00 accts
RY_LINK BOXES INPUT FLOW
RBB2 Process Region Accounts & ISA's 14.00 accts

REVW TYPE: Demand NAME: Functional Reviews
UME: 36.00 reviews
RY_LINK BOXES INPUT FLOW
OA1 Process Functional Reviews 36.00 reviews

STU2 TYPE: Demand NAME: Work Measurement Study Demand
UME: 63.00 studies
RY_LINK BOXES INPUT FLOW
OM1 Process Work Measurement Studies 63.00 studies

STUD TYPE: Demand NAME: Special Studies Demand
UME: 30.00 studies
RY_LINK BOXES INPUT FLOW
OA2 Process Special Studies 30.00 studies

JNCD TYPE: Demand NAME: Unit Cost Program Summaries
JME: 16.00 summaries
RY_LINK BOXES INPUT FLOW
BA2 Process Unit Cost Program 16.00 summaries

DETAILED REVENUE/COSTS RESULTS REPORT

MODEL TITLE : Planning & Resource Management Model
SCENARIO: ABC Impact # 1 PERIOD # : 1 Annual

BOX ID PHON Telephones OUTPUT FLOW 91.00 phones

#	Category Name	QTY	UNITS	FIXED $	VARIABLE $	TOTAL $
510	Telephone Expense	91.00	phones		24024.00	24024.0
	TOTAL COST			0.00	24024.00	24024.0

SUMMARY

-------	FIXED	VARIABLE	TOTAL
TOTAL COST	0.00	24024.00	24024.00
UNIT COST	0.00	264.00	264.00

MODEL TITLE : Planning & Resource Management Model
SCENARIO: ABC Impact # 1 PERIOD # : 1 Annual

AL$ Personnel Salaries OUTPUT FLOW 3937321.75 dollars

gory Name	QTY	UNITS	FIXED $	VARIABLE $	TOTAL $
ry Expense	3937321.75	dollars		3937321.75	3937321.75
OTAL COST			0.00	3937321.75	3937321.75

ARY

---	FIXED	VARIABLE	TOTAL
OTAL COST	0.00	3937321.75	3937321.75
NIT COST	0.00	1.00	1.00

MODEL TITLE : Planning & Resource Management Model
SCENARIO: ABC Impact # 1 PERIOD # : 1 Annual

BOX ID SUPL Supplies OUTPUT FLOW 79770.76 dollars

#	Category Name	QTY	UNITS	FIXED $	VARIABLE $	TOTAL $
310	Supplies	79770.76	dollars		79770.76	79770.
	TOTAL COST			0.00	79770.76	79770.

SUMMARY

-------	FIXED	VARIABLE	TOTAL
TOTAL COST	0.00	79770.76	79770.76
UNIT COST	0.00	1.00	1.00

MODEL TITLE : Planning & Resource Management Model
SCENARIO: ABC Impact # 1 PERIOD # : 1 Annual

RAV Travel OUTPUT FLOW 894.00 trips

gory	Name	QTY	UNITS	FIXED $	VARIABLE $	TOTAL $
el	Expense	894.00	trips		321840.00	321840.00
OTAL	COST			0.00	321840.00	321840.00

ARY

---	FIXED	VARIABLE	TOTAL
OTAL COST	0.00	321840.00	321840.00
NIT COST	0.00	360.00	360.00

MODEL TITLE : Planning & Resource Management Model
SCENARIO: ABC Impact # 1 PERIOD # : 1 Annual

BOX ID UTIL Utilities & Maintenance OUTPUT FLOW 13730.00 sqft

#	Category Name	QTY	UNITS	FIXED $	VARIABLE $	TOTAL $
610	Utilities Expense	13730.00	sqft		47780.40	47780.
	TOTAL COST			0.00	47780.40	47780.

SUMMARY

	FIXED	VARIABLE	TOTAL
TOTAL COST	0.00	47780.40	47780.40
UNIT COST	0.00	3.48	3.48

MODEL TITLE : Planning & Resource Management Model
SCENARIO: ABC Impact # 1 PERIOD # : 1 Annual

TOTAL COSTS

gory Name	QTY	UNITS	FIXED $	VARIABLE $	TOTAL $
ry Expense	3937321.75	dollars		3937321.75	3937321.75
el Expense	894.00	trips		321840.00	321840.00
lies	79770.76	dollars		79770.76	79770.76
pment Purchases		**Mixed**	80000.00		80000.00
phone Expense	91.00	phones		24024.00	24024.00
ities Expense	13730.00	sqft		47780.40	47780.40
OTAL COST			80000.00	4410736.91	4490736.91

ARY

---	FIXED	VARIABLE	TOTAL
OTAL COST	80000.00	4410736.91	4490736.91

MODEL TITLE : Planning & Resource Management Model
SCENARIO: ABC Impact # 1 PERIOD # : 1 Annual

CATEGORY #	NAME	BOXID: TYPE: FLOW:	PHON Supply 91.00	SAL$ Supply 3937321.75	SUPL Supply 79770.76	TRAV Supply 894.00	UT Supp 13730.
110	Salary Expense		0.00	3937321.75	0.00	0.00	0.
210	Travel Expense		0.00	0.00	0.00	321840.00	0.
310	Supplies		0.00	0.00	79770.76	0.00	0.
510	Telephone Expense		24024.00	0.00	0.00	0.00	0.
610	Utilities Expense		0.00	0.00	0.00	0.00	47780.
	TOTAL COSTS		24024.00	3937321.75	79770.76	321840.00	47780.
	NET PROFIT		-24024.00	-3937321.7	-79770.76	-321840.00	-47780.
	UNIT REVENUE/COST		-264.00	-1.00	-1.00	-360.00	-3.

MODEL TITLE : Planning & Resource Management Model
SCENARIO: ABC Impact # 1 PERIOD # : 1 Annual

Y ME	BOXID:	TOTAL
ıry Expense		3937321.75
ʼel Expense		321840.00
ılies		79770.76
ıpment Purchases		80000.00
ıphone Expense		24024.00
ıities Expense		47780.40
L COSTS		4490736.91
PROFIT		-4490736.9

MODEL TITLE : Planning & Resource Management Model
SCENARIO: ABC Impact # 1 PERIOD # : 1 Annual

BOX ID ABCM ABC Management OUTPUT FLOW 1.00 project

#	Category Name	QTY	UNITS	FIXED $	VARIABLE $	TOTAL $
110	Salary Expense	222633.89	dollars		222633.89	222633.
210	Travel Expense	7.32	trips		2636.71	2636.
310	Supplies	1786.73	dollars		1786.73	1786.
510	Telephone Expense	0.26	phones		68.80	68.
610	Utilities Expense	602.72	sqft		2097.45	2097.
	TOTAL COST			0.00	229223.59	229223.

SUMMARY

	FIXED	VARIABLE	TOTAL
TOTAL COST	0.00	229223.59	229223.59
UNIT COST	0.00	229223.59	229223.59

MODEL TITLE : Planning & Resource Management Model
SCENARIO: ABC Impact # 1 PERIOD # : 1 Annual

NA Analysts Labor OUTPUT FLOW 107880.00 mhrs

gory Name	QTY	UNITS	FIXED $	VARIABLE $	TOTAL $
ry Expense	2978566.79	dollars		2978566.79	2978566.79
ities Expense	8730.00	sqft		30380.40	30380.40
OTAL COST			0.00	3008947.19	3008947.19

ARY

---	FIXED	VARIABLE	TOTAL
OTAL COST	0.00	3008947.19	3008947.19
NIT COST	0.00	27.89	27.89

MODEL TITLE : Planning & Resource Management Model
SCENARIO: ABC Impact # 1 PERIOD # : 1 Annual

BOX ID DIR Director (Comptroller) OUTPUT FLOW 2080.00 mhrs

#	Category Name	QTY	UNITS	FIXED $	VARIABLE $	TOTAL $
110	Salary Expense	86694.40	dollars		86694.40	86694.
210	Travel Expense	3.00	trips		1080.00	1080.
310	Supplies	332.80	dollars		332.80	332.
510	Telephone Expense	3.00	phones		792.00	792.
610	Utilities Expense	600.00	sqft		2088.00	2088.
	TOTAL COST			0.00	90987.20	90987.

SUMMARY

	FIXED	VARIABLE	TOTAL
TOTAL COST	0.00	90987.20	90987.20
UNIT COST	0.00	43.74	43.74

MODEL TITLE : Planning & Resource Management Model
SCENARIO: ABC Impact # 1 PERIOD # : 1 Annual

DIV Division Chiefs OUTPUT FLOW 4160.00 mhrs

gory Name	QTY	UNITS	FIXED $	VARIABLE $	TOTAL $
ry Expense	196380.80	dollars		196380.80	196380.80
el Expense	9.27	trips		3336.92	3336.92
lies	806.40	dollars		806.40	806.40
phone Expense	5.27	phones		1391.08	1391.08
ities Expense	853.85	sqft		2971.38	2971.38
OTAL COST			0.00	204886.58	204886.58

ARY

---	FIXED	VARIABLE	TOTAL
OTAL COST	0.00	204886.58	204886.58
NIT COST	0.00	49.25	49.25

MODEL TITLE : Planning & Resource Management Model
SCENARIO: ABC Impact # 1 PERIOD # : 1 Annual

BOX ID FLO Accounting Labor OUTPUT FLOW 22072.00 mhrs

#	Category Name	QTY	UNITS	FIXED $	VARIABLE $	TOTAL $
110	Salary Expense	378093.34	dollars		378093.34	378093.3
210	Travel Expense	26.00	trips		9360.00	9360.(
610	Utilities Expense	2400.00	sqft		8352.00	8352.(
	TOTAL COST			0.00	395805.34	395805.3

SUMMARY

-------	FIXED	VARIABLE	TOTAL
TOTAL COST	0.00	395805.34	395805.34
UNIT COST	0.00	17.93	17.93

MODEL TITLE : Planning & Resource Management Model
SCENARIO: ABC Impact # 1 PERIOD # : 1 Annual

OVER Overtime Costs OUTPUT FLOW 1364.00 mhrs

egory Name	QTY	UNITS	FIXED $	VARIABLE $	TOTAL $
ary Expense	30935.52	dollars		30935.52	30935.52
COTAL COST			0.00	30935.52	30935.52

MARY

	FIXED	VARIABLE	TOTAL
COTAL COST	0.00	30935.52	30935.52
UNIT COST	0.00	22.68	22.68

MODEL TITLE : Planning & Resource Management Model
SCENARIO: ABC Impact # 1 PERIOD # : 1 Annual

BOX ID RBA1 Management Information Systems OUTPUT FLOW 1.00 project

#	Category Name	QTY	UNITS	FIXED $	VARIABLE $	TOTAL $
110	Salary Expense	416815.51	dollars		416815.51	416815.
210	Travel Expense	105.71	trips		38056.47	38056.
310	Supplies	6181.57	dollars		6181.57	6181.
410	Equipment Purchases	1.00	project	30000.00		30000.
510	Telephone Expense	11.61	phones		3065.80	3065.
610	Utilities Expense	1357.50	sqft		4724.10	4724.
	TOTAL COST			30000.00	468843.46	498843.

SUMMARY

-------	FIXED	VARIABLE	TOTAL
TOTAL COST	30000.00	468843.46	498843.46
UNIT COST	30000.00	468843.46	498843.46

MODEL TITLE : Planning & Resource Management Model
SCENARIO: ABC Impact # 1 PERIOD # : 1 Annual

BA2 Unit Cost Program OUTPUT FLOW 16.00 summaries

gory Name	QTY	UNITS	FIXED $	VARIABLE $	TOTAL $
ry Expense	354189.21	dollars		354189.21	354189.21
el Expense	83.70	trips		30132.66	30132.66
lies	4550.02	dollars		4550.02	4550.02
phone Expense	8.98	phones		2371.82	2371.82
ities Expense	1125.17	sqft		3915.58	3915.58
OTAL COST			0.00	395159.29	395159.29

ARY

---	FIXED	VARIABLE	TOTAL
OTAL COST	0.00	395159.29	395159.29
NIT COST	0.00	24697.46	24697.46

MODEL TITLE : Planning & Resource Management Model
SCENARIO: ABC Impact # 1 PERIOD # : 1 Annual

BOX ID RBB1 Depot Budget Accounts OUTPUT FLOW 10.00 accts

#	Category Name	QTY	UNITS	FIXED $	VARIABLE $	TOTAL $
110	Salary Expense	409669.63	dollars		409669.63	409669.6
210	Travel Expense	68.94	trips		24816.88	24816.8
310	Supplies	3845.36	dollars		3845.36	3845.3
410	Equipment Purchases	10.00	accts	15000.00		15000.0
510	Telephone Expense	9.31	phones		2458.43	2458.4
610	Utilities Expense	1316.80	sqft		4582.45	4582.4
	TOTAL COST			15000.00	445372.74	460372.7

SUMMARY

	FIXED	VARIABLE	TOTAL
TOTAL COST	15000.00	445372.74	460372.74
UNIT COST	1500.00	44537.27	46037.27

MODEL TITLE : Planning & Resource Management Model
SCENARIO: ABC Impact # 1 PERIOD # : 1 Annual

RBB2 Region Accounts & ISA's OUTPUT FLOW 14.00 accts

egory Name	QTY	UNITS	FIXED $	VARIABLE $	TOTAL $
ıry Expense	290349.01	dollars		290349.01	290349.01
vel Expense	33.72	trips		12137.87	12137.87
olies	4631.69	dollars		4631.69	4631.69
ephone Expense	5.24	phones		1383.12	1383.12
ities Expense	942.39	sqft		3279.50	3279.50
OTAL COST			0.00	311781.19	311781.19

ARY

---	FIXED	VARIABLE	TOTAL
OTAL COST	0.00	311781.19	311781.19
NIT COST	0.00	22270.09	22270.09

MODEL TITLE : Planning & Resource Management Model
SCENARIO: ABC Impact # 1 PERIOD # : 1 Annual

BOX ID RF1 Accounting Inputs for DFAS OUTPUT FLOW 20000.00 acct input

#	Category Name	QTY	UNITS	FIXED $	VARIABLE $	TOTAL $
110	Salary Expense	204884.80	dollars		204884.80	204884.8
210	Travel Expense	14.06	trips		5059.94	5059.9
310	Supplies	6093.32	dollars		6093.32	6093.3
410	Equipment Purchases	20000.00	acct input	20000.00		20000.0
510	Telephone Expense	6.50	phones		1715.76	1715.7
610	Utilities Expense	1251.94	sqft		4356.76	4356.7
	TOTAL COST			20000.00	222110.58	242110.5

SUMMARY

	FIXED	VARIABLE	TOTAL
TOTAL COST	20000.00	222110.58	242110.58
UNIT COST	1.00	11.11	12.11

MODEL TITLE : Planning & Resource Management Model
SCENARIO: ABC Impact # 1 PERIOD # : 1 Annual

RF2 Accounting Reconciliations OUTPUT FLOW 8950.00 acct recon

egory Name	QTY	UNITS	FIXED $	VARIABLE $	TOTAL $
ary Expense	129512.81	dollars		129512.81	129512.81
vel Expense	8.87	trips		3194.04	3194.04
plies	2620.32	dollars		2620.32	2620.32
ipment Purchases	8950.00	acct recon	15000.00		15000.00
ephone Expense	5.50	phones		1451.76	1451.76
lities Expense	773.51	sqft		2691.81	2691.81
TOTAL COST			15000.00	139470.74	154470.74

MARY

	FIXED	VARIABLE	TOTAL
TOTAL COST	15000.00	139470.74	154470.74
UNIT COST	1.68	15.58	17.26

MODEL TITLE : Planning & Resource Management Model
SCENARIO: ABC Impact # 1 PERIOD # : 1 Annual

BOX ID RF3 Customer Service OUTPUT FLOW 3800.00 customers

#	Category Name	QTY	UNITS	FIXED $	VARIABLE $	TOTAL $
110	Salary Expense	104861.39	dollars		104861.39	104861.39
210	Travel Expense	19.23	trips		6924.34	6924.34
310	Supplies	1181.03	dollars		1181.03	1181.03
510	Telephone Expense	7.51	phones		1982.17	1982.17
610	Utilities Expense	615.38	sqft		2141.52	2141.52
	TOTAL COST			0.00	117090.45	117090.45

SUMMARY

	FIXED	VARIABLE	TOTAL
TOTAL COST	0.00	117090.45	117090.45
UNIT COST	0.00	30.81	30.81

MODEL TITLE : Planning & Resource Management Model
SCENARIO: ABC Impact # 1 PERIOD # : 1 Annual

ROA1 Functional Reviews OUTPUT FLOW 36.00 reviews

egory Name	QTY	UNITS	FIXED $	VARIABLE $	TOTAL $
ary Expense	400055.82	dollars		400055.82	400055.82
vel Expense	104.62	trips		37661.91	37661.91
plies	22544.28	dollars		22544.28	22544.28
ephone Expense	9.04	phones		2386.30	2386.30
lities Expense	1278.11	sqft		4447.84	4447.84
OTAL COST			0.00	467096.15	467096.15

MARY

----	FIXED	VARIABLE	TOTAL
OTAL COST	0.00	467096.15	467096.15
NIT COST	0.00	12974.89	12974.89

MODEL TITLE : Planning & Resource Management Model
SCENARIO: ABC Impact # 1 PERIOD # : 1 Annual

BOX ID ROA2 Special Studies OUTPUT FLOW 30.00 studies

#	Category Name	QTY	UNITS	FIXED $	VARIABLE $	TOTAL $
110	Salary Expense	485029.25	dollars		485029.25	485029.2
210	Travel Expense	116.17	trips		41821.09	41821.0
310	Supplies	23556.70	dollars		23556.70	23556.7
510	Telephone Expense	8.64	phones		2281.04	2281.0
610	Utilities Expense	1566.69	sqft		5452.08	5452.0
	TOTAL COST			0.00	558140.16	558140.1

SUMMARY

	FIXED	VARIABLE	TOTAL
TOTAL COST	0.00	558140.16	558140.16
UNIT COST	0.00	18604.67	18604.67

MODEL TITLE : Planning & Resource Management Model
SCENARIO: ABC Impact # 1 PERIOD # : 1 Annual

OM1 Work Measurement Studies OUTPUT FLOW 63.00 studies

gory Name	QTY	UNITS	FIXED $	VARIABLE $	TOTAL $
ry Expense	535651.04	dollars		535651.04	535651.04
el Expense	175.56	trips		63202.70	63202.70
lies	2150.76	dollars		2150.76	2150.76
phone Expense	11.56	phones		3050.53	3050.53
ities Expense	1702.00	sqft		5922.96	5922.96
OTAL COST			0.00	609978.00	609978.00

ARY

---	FIXED	VARIABLE	TOTAL
OTAL COST	0.00	609978.00	609978.00
NIT COST	0.00	9682.19	9682.19

MODEL TITLE : Planning & Resource Management Model
SCENARIO: ABC Impact # 1 PERIOD # : 1 Annual

BOX ID ROM2 Master Account Records OUTPUT FLOW 240.00 accts

#	Category Name	QTY	UNITS	FIXED $	VARIABLE $	TOTAL $
110	Salary Expense	383669.43	dollars		383669.43	383669.4
210	Travel Expense	156.10	trips		56195.37	56195.3
310	Supplies	628.98	dollars		628.98	628.9
510	Telephone Expense	6.85	phones		1808.47	1808.4
610	Utilities Expense	1197.80	sqft		4168.34	4168.3
	TOTAL COST			0.00	446470.58	446470.5

SUMMARY

	FIXED	VARIABLE	TOTAL
TOTAL COST	0.00	446470.58	446470.58
UNIT COST	0.00	1860.29	1860.29

MODEL TITLE : Planning & Resource Management Model
SCENARIO: ABC Impact # 1 PERIOD # : 1 Annual

SECT Secretarial Services OUTPUT FLOW 6240.00 mhrs

egory Name	QTY	UNITS	FIXED $	VARIABLE $	TOTAL $
ary Expense	164467.30	dollars		164467.30	164467.30
vel Expense	4.13	trips		1486.46	1486.46
plies	383.38	dollars		383.38	383.38
ephone Expense	2.78	phones		734.69	734.69
lities Expense	489.28	sqft		1702.68	1702.68
TOTAL COST			0.00	168774.51	168774.51

MARY

----	FIXED	VARIABLE	TOTAL
TOTAL COST	0.00	168774.51	168774.51
UNIT COST	0.00	27.05	27.05

MODEL TITLE : Planning & Resource Management Model
SCENARIO: ABC Impact # 1 PERIOD # : 1 Annual

BOX ID SUPR Supervision OUTPUT FLOW 10378.00 mhrs

#	Category Name	QTY	UNITS	FIXED $	VARIABLE $	TOTAL $
110	Salary Expense	549726.07	dollars		549726.07	549726.0
210	Travel Expense	31.00	trips		11160.00	11160.0
310	Supplies	2243.76	dollars		2243.76	2243.7
510	Telephone Expense	12.00	phones		3168.00	3168.0
610	Utilities Expense	2400.00	sqft		8352.00	8352.0
	TOTAL COST			0.00	574649.83	574649.8

SUMMARY

	FIXED	VARIABLE	TOTAL
TOTAL COST	0.00	574649.83	574649.83
UNIT COST	0.00	55.37	55.37

MODEL TITLE : Planning & Resource Management Model
SCENARIO: ABC Impact # 1 PERIOD # : 1 Annual

TRA Training OUTPUT FLOW 10120.00 mhrs

egory Name	QTY	UNITS	FIXED $	VARIABLE $	TOTAL $
ary Expense	140280.65	dollars		140280.65	140280.65
vel Expense	15.43	trips		5553.46	5553.46
plies	5232.96	dollars		5232.96	5232.96
ephone Expense	0.93	phones		244.21	244.21
lities Expense	723.46	sqft		2517.65	2517.65
TOTAL COST			0.00	153828.94	153828.94

MARY

	FIXED	VARIABLE	TOTAL
TOTAL COST	0.00	153828.94	153828.94
UNIT COST	0.00	15.20	15.20

MODEL TITLE : Planning & Resource Management Model
SCENARIO: ABC Impac # 1 PERIOD # : 1 Annual

TOTAL COSTS

#	Category Name	QTY	UNITS	FIXED $	VARIABLE $	TOTAL $
110	Salary Expense	3937321.75	dollars		3937321.75	3937321.7
210	Travel Expense	89 .00	trips		321840.00	321840.0
310	Supplies	7977	dollars		79770.76	79770.7
410	Equipment Purchases		**Mixed**	80000.00		80000.0
510	Telephone Expense	91.00	phones		24024.00	24024.0
610	Utilities Expense	13730.00	sqft		47780.40	47780.4
	TOTAL COST			80000.00	4410736.91	4490736.9

SUMMARY

-------	FIXED	VARIABLE	TOTAL
TOTAL COST	80000.00	4410736.91	4490736.91

MODEL TITLE : Planning & Resource Management Model
SCENARIO: ABC Impact # 1 PERIOD # : 1 Annual

Y ME	BOXID: TYPE: FLOW:	ABCM Process 1.00	ANA Process 107880.00	DIR Process 2080.00	DIV Process 4160.00	FLO Process 22072.00
ary Expense		222633.89	2978566.79	86694.40	196380.80	378093.34
vel Expense		2636.71	0.00	1080.00	3336.92	9360.00
plies		1786.73	0.00	332.80	806.40	0.00
ephone Expense		68.80	0.00	792.00	1391.08	0.00
ities Expense		2097.45	30380.40	2088.00	2971.38	8352.00
AL COSTS		229223.59	3008947.19	90987.20	204886.58	395805.34
PROFIT		-229223.59	-3008947.1	-90987.20	-204886.58	-395805.34
REVENUE/COST		-229223.59	-27.89	-43.74	-49.25	-17.93

MODEL TITLE : Planning & Resource Management Model
SCENARIO: ABC Impact # 1 PERIOD # : 1 Annual

CATEGORY #	NAME	BOXID: TYPE: FLOW:	OVER Process 1364.00	RBA1 Process 1.00	RBA2 Process 16.00	RBB1 Process 10.00	RB Proce 14.
110	Salary Expense		30935.52	416815.51	354189.21	409669.63	290349.
210	Travel Expense		0.00	38056.47	30132.66	24816.88	12137.
310	Supplies		0.00	6181.57	4550.02	3845.36	4631.
410	Equipment Purchases		0.00	30000.00	0.00	15000.00	0.
510	Telephone Expense		0.00	3065.80	2371.82	2458.43	1383.
610	Utilities Expense		0.00	4724.10	3915.58	4582.45	3279.
	TOTAL COSTS		30935.52	498843.46	395159.29	460372.74	311781.1
	NET PROFIT		-30935.52	-498843.46	-395159.29	-460372.74	-311781.1
	UNIT REVENUE/COST		-22.68	-498843.46	-24697.46	-46037.27	-22270.0

MODEL TITLE : Planning & Resource Management Model
SCENARIO: ABC Impact # 1 PERIOD # : 1 Annual

RY / ME	BOXID: / TYPE: / FLOW:	RF1 Process 20000.00	RF2 Process 8950.00	RF3 Process 3800.00	ROA1 Process 36.00	ROA2 Process 30.00
ary Expense		204884.80	129512.81	104861.39	400055.82	485029.25
vel Expense		5059.94	3194.04	6924.34	37661.91	41821.09
plies		6093.32	2620.32	1181.03	22544.28	23556.70
ipment Purchases		20000.00	15000.00	0.00	0.00	0.00
ephone Expense		1715.76	1451.76	1982.17	2386.30	2281.04
lities Expense		4356.76	2691.81	2141.52	4447.84	5452.08
AL COSTS		242110.58	154470.74	117090.45	467096.15	558140.16
PROFIT		-242110.58	-154470.74	-117090.45	-467096.15	-558140.16
T REVENUE/COST		-12.11	-17.26	-30.81	-12974.89	-18604.67

SUMMARY BOX REVENUE/COST REPORT

MODEL TITLE : Planning & Resource Management Model
SCENARIO: ABC Impact # 1 PERIOD # : 1 Annual

CATEGORY #	NAME	BOXID: TYPE: FLOW:	ROM1 Process 63.00	ROM2 Process 240.00	SECT Process 6240.00	SUPR Process 10378.00	TRA Process 10120.00
110	Salary Expense		535651.04	383669.43	164467.30	549726.07	140280.65
210	Travel Expense		63202.70	56195.37	1486.46	11160.00	5553.46
310	Supplies		2150.76	628.98	383.38	2243.76	5232.96
510	Telephone Expense		3050.53	1808.47	734.69	3168.00	244.21
610	Utilities Expense		5922.96	4168.34	1702.68	8352.00	2517.65
	TOTAL COSTS		609978.00	446470.58	168774.51	574649.83	153828.94
	NET PROFIT		-609978.00	-446470.58	-168774.51	-574649.83	-153828.94
	UNIT REVENUE/COST		-9682.19	-1860.29	-27.05	-55.37	-15.20

MODEL TITLE : Planning & Resource Management Model
SCENARIO: ABC Impact # 1 PERIOD # : 1 Annual

Y ME	BOXID:	TOTAL
ary Expense		3937321.75
vel Expense		321840.00
plies		79770.76
ipment Purchases		80000.00
ephone Expense		24024.00
lities Expense		47780.40
AL COSTS		4490736.91
PROFIT		-4490736.9

MODEL TITLE : Planning & Resource Management Model
SCENARIO: ABC Impact # 1 PERIOD # : 1 Annual

BOX ID ABCD ABC Project OUTPUT FLOW 1.00 project

#	Category Name	QTY	UNITS	FIXED $	VARIABLE $	TOTAL $
110	Salary Expense	222633.89	dollars		222633.89	222633.89
210	Travel Expense	7.32	trips		2636.71	2636.71
310	Supplies	1786.73	dollars		1786.73	1786.73
510	Telephone Expense	0.26	phones		68.80	68.80
610	Utilities Expense	602.72	sqft		2097.45	2097.45
	TOTAL COST			0.00	229223.59	229223.59

SUMMARY

-------	FIXED	VARIABLE	TOTAL
TOTAL COST	0.00	229223.59	229223.59
UNIT COST	0.00	229223.59	229223.59

MODEL TITLE : Planning & Resource Management Model
SCENARIO: ABC Impact # 1 PERIOD # : 1 Annual

ARCN Accounting Reconciles OUTPUT FLOW 8950.00 acct recon

egory Name	QTY	UNITS	FIXED $	VARIABLE $	TOTAL $
ary Expense	129512.81	dollars		129512.81	129512.81
vel Expense	8.87	trips		3194.04	3194.04
plies	2620.32	dollars		2620.32	2620.32
ipment Purchases	8950.00	acct recon	15000.00		15000.00
ephone Expense	5.50	phones		1451.76	1451.76
lities Expense	773.51	sqft		2691.81	2691.81
TOTAL COST			15000.00	139470.74	154470.74

MARY

	FIXED	VARIABLE	TOTAL
TOTAL COST	15000.00	139470.74	154470.74
UNIT COST	1.68	15.58	17.26

MODEL TITLE : Planning & Resource Management Model
SCENARIO: ABC Impact # 1 PERIC: # : 1 Annual

BOX ID CUST Customers OUTPUT FLOW 3800.00 customers

#	Category Name	QTY	UNITS	FIXED $	VARIABLE $	TOTAL $
110	Salary Expense	104861.39	dollars		104861.39	104861.3
210	Travel Expense	19.23	trips		6924.34	6924.3
310	Supplies	1181.03	dollars		1181.03	1181.0
510	Telephone Expense	7.51	phones		1982.17	1982.1
610	Utilities Expense	615.38	sqft		2141.52	2141.5
	TOTAL COST			0.00	117090.45	117090.4

SUMMARY

-------	FIXED	VARIABLE	TOTAL
TOTAL COST	0.00	117090.45	117090.45
UNIT COST	0.00	30.81	30.81

MODEL TITLE : Planning & Resource Management Model
SCENARIO: ABC Impact # 1 PERIOD # : 1 Annual

DACT Depot Accounts OUTPUT FLOW 10.00 accts

egory Name	QTY	UNITS	FIXED $	VARIABLE $	TOTAL $
ary Expense	409669.63	dollars		409669.63	409669.63
vel Expense	68.94	trips		24816.88	24816.88
plies	3845.36	dollars		3845.36	3845.36
ipment Purchases	10.00	accts	15000.00		15000.00
ephone Expense	9.31	phones		2458.43	2458.43
lities Expense	1316.80	sqft		4582.45	4582.45
TOTAL COST			15000.00	445372.74	460372.74

MARY

----	FIXED	VARIABLE	TOTAL
TOTAL COST	15000.00	445372.74	460372.74
UNIT COST	1500.00	44537.27	46037.27

MODEL TITLE : Planning & Resource Management Model
SCENARIO: ABC Impact # 1 PERIOD # : 1 Annual

BOX ID INPT Accounting Inputs OUTPUT FLOW 20000.00 acct input

#	Category Name	QTY	UNITS	FIXED $	VARIABLE $	TOTAL $
110	Salary Expense	204884.80	dollars		204884.80	204884.80
210	Travel Expense	14.06	trips		5059.94	5059.94
310	Supplies	6093.32	dollars		6093.32	6093.32
410	Equipment Purchases	20000.00	acct input	20000.00		20000.00
510	Telephone Expense	6.50	phones		1715.76	1715.76
610	Utilities Expense	1251.94	sqft		4356.76	4356.76
	TOTAL COST			20000.00	222110.58	242110.58

SUMMARY

-------	FIXED	VARIABLE	TOTAL
TOTAL COST	20000.00	222110.58	242110.58
UNIT COST	1.00	11.11	12.11

MODEL TITLE : Planning & Resource Management Model
SCENARIO: ABC Impact # 1 PERIOD # : 1 Annual

MAR Master Account Records OUTPUT FLOW 240.00 accts

egory Name	QTY	UNITS	FIXED $	VARIABLE $	TOTAL $
ary Expense	383669.43	dollars		383669.43	383669.43
vel Expense	156.10	trips		56195.37	56195.37
plies	628.98	dollars		628.98	628.98
ephone Expense	6.85	phones		1808.47	1808.47
lities Expense	1197.80	sqft		4168.34	4168.34
TOTAL COST			0.00	446470.58	446470.58

MARY

----	FIXED	VARIABLE	TOTAL
TOTAL COST	0.00	446470.58	446470.58
UNIT COST	0.00	1860.29	1860.29

MODEL TITLE : Planning & Resource Management Model
SCENARIO: ABC Impact # 1 PERIOD # : 1 Annual

BOX ID MISD Mgmt Info System Project OUTPUT FLOW 1.00 project

#	Category Name	QTY	UNITS	FIXED $	VARIABLE $	TOTAL $
110	Salary Expense	416815.51	dollars		416815.51	416815.5
210	Travel Expense	105.71	trips		38056.47	38056.4
310	Supplies	6181.57	dollars		6181.57	6181.5
410	Equipment Purchases	1.00	project	30000.00		30000.0
510	Telephone Expense	11.61	phones		3065.80	3065.8
610	Utilities Expense	1357.50	sqft		4724.10	4724.1
	TOTAL COST			30000.00	468843.46	498843.4

SUMMARY

-------	FIXED	VARIABLE	TOTAL
TOTAL COST	30000.00	468843.46	498843.46
UNIT COST	30000.00	468843.46	498843.46

MODEL TITLE : Planning & Resource Management Model
SCENARIO: ABC Impact # 1 PERIOD # : 1 Annual

RACT Region Accounts OUTPUT FLOW 14.00 accts

tegory Name	QTY	UNITS	FIXED $	VARIABLE $	TOTAL $
lary Expense	290349.01	dollars		290349.01	290349.01
avel Expense	33.72	trips		12137.87	12137.87
pplies	4631.69	dollars		4631.69	4631.69
lephone Expense	5.24	phones		1383.12	1383.12
ilities Expense	942.39	sqft		3279.50	3279.50
TOTAL COST			0.00	311781.19	311781.19

MMARY

	FIXED	VARIABLE	TOTAL
TOTAL COST	0.00	311781.19	311781.19
UNIT COST	0.00	22270.09	22270.09

MODEL TITLE : Planning & Resource Management Model
SCENARIO: ABC Impact # 1 PERIOD # : 1 Annual

BOX ID REVW Functional Reviews OUTPUT FLOW 36.00 reviews

#	Category Name	QTY	UNITS	FIXED $	VARIABLE $	TOTAL $
110	Salary Expense	400055.82	dollars		400055.82	400055.8
210	Travel Expense	104.62	trips		37661.91	37661.9
310	Supplies	22544.28	dollars		22544.28	22544.2
510	Telephone Expense	9.04	phones		2386.30	2386.3
610	Utilities Expense	1278.11	sqft		4447.84	4447.8
	TOTAL COST			0.00	467096.15	467096.1

SUMMARY

	FIXED	VARIABLE	TOTAL
TOTAL COST	0.00	467096.15	467096.15
UNIT COST	0.00	12974.89	12974.89

MODEL TITLE : Planning & Resource Management Model
SCENARIO: ABC Impact # 1 PERIOD # : 1 Annual

STU2 Work Measurement Study Demand OUTPUT FLOW 63.00 studies

tegory Name	QTY	UNITS	FIXED $	VARIABLE $	TOTAL $
lary Expense	535651.04	dollars		535651.04	535651.04
avel Expense	175.56	trips		63202.70	63202.70
pplies	2150.76	dollars		2150.76	2150.76
lephone Expense	11.56	phones		3050.53	3050.53
ilities Expense	1702.00	sqft		5922.96	5922.96
TOTAL COST			0.00	609978.00	609978.00

MARY

	FIXED	VARIABLE	TOTAL
TOTAL COST	0.00	609978.00	609978.00
UNIT COST	0.00	9682.19	9682.19

MODEL TITLE : Planning & Resource Management Model
SCENARIO: ABC Impact # 1 PERIOD # : 1 Annual

BOX ID STUD Special Studies Demand OUTPUT FLOW 30.00 studies

#	Category Name	QTY	UNITS	FIXED $	VARIABLE $	TOTAL $
110	Salary Expense	485029.25	dollars		485029.25	485029.25
210	Travel Expense	116.17	trips		41821.09	41821.09
310	Supplies	23556.70	dollars		23556.70	23556.70
510	Telephone Expense	8.64	phones		2281.04	2281.04
610	Utilities Expense	1566.69	sqft		5452.08	5452.08
	TOTAL COST			0.00	558140.16	558140.16

SUMMARY

-------	FIXED	VARIABLE	TOTAL
TOTAL COST	0.00	558140.16	558140.16
UNIT COST	0.00	18604.67	18604.67

MODEL TITLE : Planning & Resource Management Model
SCENARIO: ABC Impact # 1 PERIOD # : 1 Annual

UNCD Unit Cost Program Summaries OUTPUT FLOW 16.00 summaries

tegory Name	QTY	UNITS	FIXED $	VARIABLE $	TOTAL $
lary Expense	354189.21	dollars		354189.21	354189.21
avel Expense	83.70	trips		30132.66	30132.66
pplies	4550.02	dollars		4550.02	4550.02
lephone Expense	8.98	phones		2371.82	2371.82
ilities Expense	1125.17	sqft		3915.58	3915.58
TOTAL COST			0.00	395159.29	395159.29

MARY

----	FIXED	VARIABLE	TOTAL
TOTAL COST	0.00	395159.29	395159.29
UNIT COST	0.00	24697.46	24697.46

MODEL TITLE : Planning & Resource Management Model
SCENARIO: ABC Impact # 1 PERIOD # : 1 Annual

TOTAL COSTS

#	Category Name	QTY	UNITS	FIXED $	VARIABLE $	TOTAL $
110	Salary Expense	3937321.75	dollars		3937321.75	3937321.75
210	Travel Expense	894.00	trips		321840.00	321840.00
310	Supplies	79770.76	dollars		79770.76	79770.76
410	Equipment Purchases		**Mixed**	80000.00		80000.00
510	Telephone Expense	91.00	phones		24024.00	24024.00
610	Utilities Expense	13730.00	sqft		47780.40	47780.40
	TOTAL COST			80000.00	4410736.91	4490736.91

SUMMARY

-------	FIXED	VARIABLE	TOTAL
TOTAL COST	80000.00	4410736.91	4490736.91

SUMMARY BOX REVENUE/COST REPORT

MODEL TITLE : Planning & Resource Management Model
SCENARIO: ABC Impact # 1 PERIOD # : 1 Annual

RY AME	BOXID: TYPE: FLOW:	ABCD Demand 1.00	ARCN Demand 8950.00	CUST Demand 3800.00	DACT Demand 10.00	INPT Demand 20000.00
lary Expense		222633.89	129512.81	104861.39	409669.63	204884.80
avel Expense		2636.71	3194.04	6924.34	24816.88	5059.94
pplies		1786.73	2620.32	1181.03	3845.36	6093.32
uipment Purchases		0.00	15000.00	0.00	15000.00	20000.00
lephone Expense		68.80	1451.76	1982.17	2458.43	1715.76
ilities Expense		2097.45	2691.81	2141.52	4582.45	4356.76
TAL COSTS		229223.59	154470.74	117090.45	460372.74	242110.58
T PROFIT		-229223.59	-154470.74	-117090.45	-460372.74	-242110.58
T REVENUE/COST		-229223.59	-17.26	-30.81	-46037.27	-12.11

SUMMARY BOX REVENUE/COST REPORT

MODEL TITLE : Planning & Resource Management Model
SCENARIO: ABC Impact # 1 PERIOD # : 1 Annual

CATEGORY #	NAME	BOXID: TYPE: FLOW:	MAR Demand 240.00	MISD Demand 1.00	RACT Demand 14.00	REVW Demand 36.00	STU2 Demand 63.00
110	Salary Expense		383669.43	416815.51	290349.01	400055.82	535651.04
210	Travel Expense		56195.37	38056.47	12137.87	37661.91	63202.70
310	Supplies		628.98	6181.57	4631.69	22544.28	2150.76
410	Equipment Purchases		0.00	30000.00	0.00	0.00	0.00
510	Telephone Expe: e		1808.47	3065.80	1383.12	2386.30	3050.53
510	Utilities Expense		4168.34	4724.10	3279.50	4447.84	5922.96
	TOTAL COSTS		446470.58	498843.46	311781.19	467096.15	609978.00
	NET PROFIT		-446470.58	-498843.46	-311781.19	-467096.15	-609978.00
	UNIT REVENUE/COST		-1860.29	-498843.46	-22270.09	-12974.89	-9682.19

MODEL TITLE : Planning & Resource Management Model
SCENARIO: ABC Impact # 1 PERIOD # : 1 Annual

ORY NAME	BOXID: TYPE: FLOW:	STUD Demand 30.00	UNCD Demand 16.00	TOTAL
alary Expense		485029.25	354189.21	3937321.75
ravel Expense		41821.09	30132.66	321840.00
upplies		23556.70	4550.02	79770.76
quipment Purchases		0.00	0.00	80000.00
elephone Expense		2281.04	2371.82	24024.00
tilities Expense		5452.08	3915.58	47780.40
OTAL COSTS		558140.16	395159.29	4490736.91
ET PROFIT		-558140.16	-395159.29	-4490736.9
NIT REVENUE/COST		-18604.67	-24697.46	

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